THE LANCET.

VOL. I.] LONDON, SATURDAY, MARCH 6, 1841. [1840-41.

COURSE OF LECTURES
ON THE
DISEASES OF THE EYE,
Delivered in 1840,
AT THE
ROYAL SCHOOL OF ANATOMY AND MEDICINE,
MANCHESTER,
By JOHN WALKER, Esq., Surgeon.
(Second Division.)

LECTURE VI.

DISEASES OF THE CRYSTALLINE HUMOR.

In the preceding lectures I have described the principal morbid affections of the various tunics or membranes of the eye, and have now to direct your attention to those of its different humors.

Of the three humors or lenses of the eye, the crystalline is not only the most important, but it is likewise the most frequently affected with disease, and may therefore fairly be regarded as entitled to a priority of notice.

I shall not occupy your time by entering upon a detailed account of *lentitis* and *capsulitis*, or inflammation of the lens and its capsule, because these conditions are merely the result of extension of inflammatory action of the iris, or some of the internal textures of the globe.

Morbid changes of the crystalline humor, or of its capsule, however originating, are always followed by one very striking alteration in its appearance, viz., a loss of transparency, the technical name of which is *cataract*.

Opacity of the crystalline, or cataract, is, no doubt, occasionally the result of increased action or inflammation. More commonly, however, it seems to depend on a diminution or loss of vitality, the vessels supplying the lens being weakened or impaired in their action, or, in some instances, they may be even cut off or ruptured, as may be supposed to be the case when cataract supervenes upon blows or other injuries inflicted on the eye. Doubtless, it is from diminished vitality that this morbid condition so frequently arises in elderly persons. A similar state of opacity is likewise frequently noticed around the margin of the cornea at a somewhat advanced period of life,—the condition of which I formerly spoke as constituting the appearance termed *arcus senilis*, and which, according to Dr. Ammon, is always accompanied by a corresponding opacity of the circumference of the crystalline.

It is very difficult to assign a cause which shall satisfactorily account for this morbid condition in many cases, but there seems no reason to suppose that the causes of opacity of the crystalline can be different from those producing morbid changes elsewhere, since we find it following inflammation, injuries, and the like, as well as being hereditary and congenital. Whatever be the exciting cause, however, loss of transparency is an invariable result of disease of the crystalline; and as this condition must necessarily impair vision to a very considerable extent, it becomes a matter of great interest and importance both to the surgeon and patient.

The disturbance of vision which accompanies opacity of the crystalline is intended to be expressed by the term employed to designate it, viz., cataract, which is derived from the Greek, and signifies breaking down or disturbing, implying that sight is much impaired or destroyed by it. The amount of injury to vision will, of course, depend upon the intensity of the affection; for if the opacity be not very dense or very extensive, vision will be but slightly interfered with: indeed, we often perceive a decided opacity or coloration of the lens in elderly persons, without any material defect of sight.

Opacity is regarded by some writers as the original condition of the crystalline. I have myself witnessed this, in several instances, in the eye of the fœtus. In general, the opacity disappears as the period of birth approaches, the lens usually remaining transparent through the greater part of life, and again displaying a tendency to become opake as old age advances. The period of life most obnoxious to it appears to be from sixty to seventy years of age, although occasionally observed at all ages.

An endless variety of names have been be-

stowed upon the varied appearances which the crystalline presents when affected with cataract, most of which, however, are of little or no practical utility. When the crystalline alone is thus affected, the disease is named *lenticular*,—when the capsule alone, *capsular*; and when both are involved in the morbid change, *capsulo-lenticular cataract*. Some writers mention an opacity of the *aqua Morgagnii*, as constituting a species of cataract; but it is extremely doubtful if there be any foundation for such a view, because that fluid exists in so minute a quantity as scarcely to be appreciable; and, moreover, if it were liable to become turbid, there can be little doubt that it, like the aqueous humor, would usually regain its transparency. The general and practical divisions of cataract are into the hard, soft, milky, accidental, and capsular varieties; and, under these different heads, I trust to be able to bring before you every fact of importance relating to this interesting subject.

I shall commence with the consideration of *hard cataract*. This variety of cataract is usually met with in elderly persons. The lens, indeed, in old age, generally becomes firmer, whether it be opake or otherwise; it likewise diminishes in bulk, and loses much of its convexity. When cataract exists in elderly persons, the crystalline, instead of being perfectly transparent, and therefore invisible, is observed a little behind the pupil, of a yellowish or amber colour, and decidedly opake. Such is, at least, the case when the crystalline alone, and more particularly its central portion, is the seat of this morbid change; but, in cases of capsulo-lenticular cataract, then the opake body appears to be actually in contact with the posterior surface of the iris, and, instead of being of a yellow or amber colour, is of a pearly white. The amount of vision in these two cases is ordinarily very different, for if the crystalline alone is opake, the opacity is usually most dense in its centre, the outer laminæ frequently retaining a certain amount of transparency, so that the rays of light pass through the pupil and circumference of the lens; and thus vision, although very imperfect, is seldom completely destroyed. If the capsule, also, have become opake, then the opake body, lying in immediate contact with the posterior surface of the iris, completely shuts out all the rays of light, and vision is almost annihilated, but little more than the power of distinguishing light from darkness remaining to the patient.

The amount of vision, then, will much depend on the circumstance of whether the lens alone be opake, or the capsule also have become involved in the opacity. When the capsule is opake, the lens will usually be so likewise; but this can only be ascertained after its removal, except the opacity was first noticed in the body of the lens, and was subsequently observed to extend to the capsule. This, however, makes no difference in the treatment, because the opake capsule cannot be removed without the previous removal or destruction of the lens.

When the crystalline alone is the seat of opacity, I have said that vision is much less affected than when the capsule is also opake; this is more particularly the case if the opacity be confined, or nearly so, to the nucleus or central laminæ of the lens. But, in some instances, the opacity is so general as to prove a complete barrier to the passage of the rays of light; when this happens, the external laminæ usually present a whitish, glistening, and radiated appearance, and the dark yellow or amber colour, which is confined to the central laminæ, is not perceived through the white and streaked opacity of the external layers. This appearance of the outer laminæ often leads to the supposition that the lens is soft; but, I believe, the only inference that can properly be drawn from it relates to the seat of the opacity rather than to the consistency of the cataract. No doubt, the external are generally less dense than the central laminæ; and this may account for the difference of colour in each when affected with opacity.

Lenticular cataract, when it occurs at an advanced age, is often of very slow progress. Sometimes there is a central opacity, confined to a very small space, which remains stationary for many months, or even years, without materially impairing vision. In this event, the sight is improved by the use of convex spectacles; and, in most cases of incipient or imperfect cataract, vision is found to be better in a dull light, or on a cloudy day, because of the greater dilatation of the pupil which then obtains; for the same reason, the patient sees better when his back is turned to the window and from the light into the shaded part of the room; so also after the application of belladonna. These circumstances usually form a sufficient criterion to distinguish between cataract and amaurosis; for, in the latter condition, the greater the amount of light and the better for vision; whereas, in cataract, as I have said, it is just the reverse.

As the opacity increases, the patient's vision becomes more impaired, the difficulty of discerning objects is augmented, every thing appears to be enveloped in a dense mist or fog, and he can only perceive at all distinctly such objects as are highly luminous, as a sheet of white paper, the flame of a candle, and the like. In some instances, indeed, there is little more than the ability to distinguish light from darkness remaining. This, however, is but rarely the case when the function of the retina remains unaffected. In general, the patient can make out vivid colours, the form and situation of surrounding objects, and can perceive his fingers when held up before his eyes, and count them, although, of course, indistinctly, and as if

seen through a thick veil or cloud. This cloudy appearance of objects, in cases of cataract, is usually of a whitish or greyish colour; whilst, in amaurotic cases, it is generally black.

There can be but little difficulty in ascertaining the opake condition of the crystalline, when it has arrived at such a degree as materially to impair vision. Instead of the intense black, which the pupil presents when the lens is transparent, we observe an opake, yellowish, or pearl-coloured substance, in almost immediate contact with the iris, the fringed border of which forms a striking object; and, when the opacity does not affect the capsule, and the outer laminæ of the crystalline retain a certain degree of transparency, there is a dark-coloured ring observed upon the opake lens, which is caused by the shadow of the iris being thrown upon that body.

No one accustomed to the examination of the eye, when the subject of cataract, can mistake the opacity produced by disease or injury of the crystalline for other opake appearances, which are sometimes noticed, such as in cases of glaucoma, fungus hæmatodes, and the like. Mistakes of this description are, however, sometimes made. In glaucoma, the opacity is of a sea-green colour; it is seated much farther back in the posterior chamber, and usually bears no relation to the accompanying imperfection of vision. Other amaurotic symptoms are likewise usually present, such as muscæ, scintillations of light, coloured rings, and the like. In fungus hæmatodes the opacity is of a shining, metallic appearance, very different to the white or yellow-coloured opacity which the lens or capsule exhibits.

Pure cataract is rarely attended with, or preceded by, much local suffering or constitutional disturbance, as is commonly the case with amaurosis, such as vertigo, headach, chronic, and deep-seated ophthalmia, and the like. The motions of the iris are also usually quite perfect; the pupil contracting and dilating with the varying intensity of the light; and, if these motions are not observable, or are only imperfectly and sluggishly performed, we may fairly suspect the existence of amaurosis, or other affection of the internal textures; but, as an active condition of the iris is sometimes witnessed in amaurotic eyes, we must not depend simply upon this as a criterion of the healthy state of the retina, but also take into consideration the actual amount of vision, as well as the general appearance of the organ. Operations for cataract are often performed upon the eyes of individuals whose pupils are active, and who possess a general sensibility to light, without any benefit resulting, because of the insensible condition of the retina, which is apt to be overlooked, on account of the surgeon adhering too closely to the somewhat fallacious axiom, that an active pupil is the index of a healthy condition of the retina.

Cataract is occasionally confined to one eye; but this is more frequently the case in young and middle-aged persons. In elderly people, it not unfrequently happens that one is very considerably affected, and the other but slightly; and this may be the case for some time, but, sooner or later, vision generally becomes obscured in both.

The *medical treatment* of cataract is very unsatisfactory. Some practitioners, regarding the disease as commonly the result of inflammatory action, have recommended bloodletting, mercury, and general antiphlogistic remedies; whilst others have thought that counter-irritation, by caustic issues, and powerful stimulating applications to the orbital region, as ammonia, galvanism, and electricity, might prove useful in exciting the action of the absorbents, so as to remove the opake matter supposed to be deposited into the texture of the lens, and to render it again transparent. Opacity of the lens, however, seems rather to consist of an entire change of its organisation than an opake deposit into its texture, and therefore no analogy exists between this species of opacity and that resulting from inflammation. I do not believe that a case of restoration of the transparency of an opake lens has ever yet been witnessed, so that any expectation of benefit to result from the treatment of which I have spoken is not likely to be realised. The only remedy with which we are at present acquainted is the removal of the opake body from the axis of vision, a proceeding which can only be accomplished by a surgical operation.

In cases of hard cataract, this may be effected either by extracting it from the eye, by incision, or by depressing it into the vitreous humor. The first, in point of importance, and, when efficiently and successfully performed, by far the most satisfactory operation, is that termed *extraction*.

In performing the operation for extraction, the object of the surgeon is to remove the opake crystalline from the eye at once. This operation, when practicable, is to be preferred in elderly persons, because in them, as I have previously stated, the cataracts are almost always hard; and if left to undergo the process of absorption, as in the other modes of operating, would take a very long time for their removal, and probably be a source of constant irritation within the eye, so as to excite internal inflammation, resulting in closed pupil, or even amaurosis. It is, therefore, generally admitted by those who have had competent means of forming an opinion, that extraction is the operation best suited to the case of hard cataract. We need, therefore, have no hesitation in recommending this operation in such a case, except there be some formidable impediment in the way, as a sunken condition of the eye, a very convex state of the iris, so as materially to

diminish the size of the anterior chamber, or a remarkable degree of unsteadiness and timidity on the part of the patient. Extraction, however, is not to be entered upon rashly, and without due caution and preparation on the side of the operator. There is, probably, no operation in the whole range of surgery that requires a greater amount of coolness, dexterity, and easy manipulation. "The operation of extraction through the cornea (says Dr. Mackenzie) is too artificial a piece of surgery to be trusted to the hands of those who have not made themselves masters of the subject, and already shown a certain share of natural or acquired dexterity in operating on the eye. It is too nice and dangerous an operation to be undertaken without the utmost precaution, composure, and steadiness." Manual dexterity is far from being the highest qualification of a surgeon; it is, however, of so much importance in extraction, that he who does not possess a moderate share of it would do well to abstain from the attempt.

Previously to the performance of an operation for cataract, and especially that of extraction, it is of great importance to ascertain if the patient be in a fit condition to encounter it. If he be out of health, of too plethoric a habit, or the system be unduly depressed, or the subject of bronchial or rheumatic affection, these conditions, or any of them, should first of all be remedied. Generally speaking, due attention to the state of the alimentary canal, a rather abstemious diet for some time previous, and, in plethoric persons, venesection, a day or two before the operation, are the important points to attend to. It would, of course, be highly improper to operate whilst any tracheal or pulmonary irritation exists, as the coughing must be exceedingly injurious to the eye afterwards, tending to force open the wound of the cornea, and to excite and injure the organ materially. So with rheumatism, there would be danger of the morbid action extending to the fibrous and muscular tissues of the eye. Any affection of the palpebræ, chronic ophthalmia, or any other disease of the eye, or its appendages, should also be first remedied, and any other source of irritation elsewhere removed, if practicable.

Some surgeons consider that extreme old age is an unfavourable period of life for after recovery; they imagine that the reparative powers would be insufficient, and that there would be an uncontrollable tendency to ulceration, or sloughing of the cornea, after the section of so large a portion as is necessary for the removal of a cataract. My own experience is against that view; I have generally found that in very old persons there is less liability to inflammation, and that when the healing process is retarded, it is in consequence of a more or less severe attack of that morbid action. I have performed this operation on a person very nearly ninety years of age, with the most perfect success; vision having been completely restored in both eyes, and without any inflammation having come on, the incisions having healed so perfectly as now to be scarcely traceable. The late Sir Wm. Blizard also had the operation of extraction performed upon him, by Mr. Lawrence, at about the same age, and with, I believe, perfect success. Other surgeons have stated that when there is *arcus senilis*, the operation for extraction ought not to be performed, inasmuch as it indicates a feebleness of action in the vascular economy of the eye, which would probably prevent the union of a wound inflicted on the cornea in that condition. I have several times incised the cornea, when thus affected, with as great success as where no such affection existed.

It is a question with some surgeons, too, whether, when both eyes are the subject of cataract, the operation should be attempted on more than one at a time; others, again, maintaining that it is best to operate on both at once. I prefer the latter course, because it saves a great deal of confinement, anxiety, and suffering to the patient, and I have never seen any reason to regret this preference. It is said that, in the event of a severe attack of inflammation, there is greater danger when both eyes have been subjected to the operation, than when it has been confined to one; it generally happens, however, that when both eyes are thus affected, one is much worse than the other; and I think it must be a rare occurrence for both to be lost, simply from the inflammation that ensues, when the case has been properly attended to, and nothing unusual has happened during the performance of the operation.

When one eye only is the subject of cataract, it is generally unnecessary to interfere, particularly in old people; vision cannot be said to be lost, when only one is thus affected; and nothing less than a very serious impairment, if not an almost total loss of vision, can justify an operation of this importance. When one eye has been previously lost, from any other disease, and particularly from amaurosis, and the other is the subject of cataract, we should be in no haste to operate upon the latter, and always enter upon an operation in such circumstances with hesitation and apprehension as to the result.

Having decided as to the propriety of attempting the operation for extraction, the next question is, as to the proper position for the patient. Some surgeons prefer that the patient be placed horizontally on a bed, table, or sofa: in this position, the operator usually places himself behind the patient on a stool, at a proper elevation, and secures the upper eyelid, whilst an assistant depresses the lower one in front. Others choose to have the patient sitting in a suitable chair; then the operator seats himself before the patient, and takes charge of the lower lid; and the

assistant, standing behind, elevates and fixes the upper lid, and makes gentle pressure on the globe, so as to steady it. Neither of these positions will be at all times convenient. I am inclined generally to prefer the former, because in the horizontal position the patient is steadier, he is more under the control of the surgeon, and the management of the upper eyelid, and the proper amount of pressure on the globe, can all be regulated with more exactness by the operator himself than by another. The principal objection is, that the eye, in irritable individuals, is very apt to roll upwards under the superior lid, particularly when it is much sunken, and does not admit of being fixed by the fingers of the surgeon; in this event, there is a difficulty in completing the section when attempted upwards.

The instruments necessary to be provided with for the operation of extraction are the cornea or extraction-knife, and a curette with a scoop at the other extremity of the handle. Others are sometimes required to enlarge the wound of the cornea, when not made sufficiently ample at first; such as a convex-bladed knife, or a very fine pair of scissors, which should always be close at hand.

The cornea-knife is the principal instrument, and that introduced by Beer is the one now in general use; it is, as is well known, of a somewhat triangular shape, and seems much superior to any previously employed. I have thought, however, that it might be improved upon. The great difficulty in the operation for extraction is in making the incision around the margin of the cornea of a sufficient extent. It but rarely happens, indeed, that the operator can make this of the size which he has previously determined upon, and hence the necessity for instruments to enlarge the wound of the cornea. It occurred to me that this difficulty might be diminished by employing an instrument having a cutting edge on both sides, each side forming an equal angle, and of a spear-shape, as in the accompanying diagram.

This instrument, it will be perceived, whilst traversing the anterior chamber, and cutting round the upper margin of the cornea, will likewise, to a certain extent, cut round its lower margin, and thus make a larger opening than can readily be effected by the use of Beer's knife. It is curious that an instrument of similar shape was employed by Daviel (who first performed the operation of extraction) in the first stage of the proceedings. His instrument, however, was very small, scarcely larger, I imagine, than a packing-needle,—une aiguille pointue, tranchante, et demie-courbée, ayant la forme d'une lancette, destinée pour faire la première ouverture—and was merely used, as will be seen, for the purpose of puncturing the cornea, others being afterwards employed for enlarging the opening.*

Instruments having a cutting edge on the back, to a greater or less extent, have been used by various operators. Wenzel's knife, at the upper edge, "to the extent of one-eighth of an inch from the point, is keen like the lower edge, in order to facilitate the conveyance of the instrument through the cornea." Mr. Cleobury, of Oxford, speaks of having occasionally used a knife with "a cutting edge below, and at its back, for half the length of the blade; this knife, by cutting upwards as well as downwards, makes, what is so very desirable, a large opening in the cornea for the ready escape of the lens." Professor Rosas is also in the habit of using Beer's knife, with a cutting edge on both sides. Mr. Middlemore has likewise used an instrument somewhat resembling the one I have described, for the purpose of removing staphylomatous projections from the cornea.

Some operators think that the dilatation of the pupil, previously to the performance of this operation, is of importance. I see no particular advantage in this; on the other hand, I think the point of the knife is apt to catch against the pupillary margin of the iris, after the belladonna has freely acted, and that, therefore, there is greater danger of injuring that structure than when the pupil is contracted.

The patient being extended on a sofa, we will suppose, the head raised to a convenient height by pillows, and the right eye the one to be first operated upon, the surgeon taking his seat behind, raises the superior eyelid with the fore and middle fingers of his left hand, and steadily presses it against the superciliary ridge, at the same time fixing the globe so as to prevent its moving away; the cornea-knife being held in the right hand, between the thumb and two fingers, in the manner of a pen, is made to penetrate the anterior chamber by puncturing the cornea at its temporal margin, the instrument is then pushed on to the corresponding point of its nasal margin, and, so soon as the counter-punctuation is effected, is made to cut directly upwards; a proceeding which usually divides about one-half of the margin of the cornea, and of course lays open the anterior chamber to a similar extent: this should be effected with as little loss of time as practicable, because the aqueous humor immediately escapes, the iris falls forward, and the knife is apt to get entangled within it, and some mischief may ensue; but, even in this event, it

* Mem. de la Academ. Roy. de Chirurg., vol. i., p. 344.

is best to push on, and complete the section of the cornea, although the iris may be injured by so doing, since more damage is sure ultimately to follow the withdrawal of the knife, and the employment of other instruments to enlarge the wound, than can result from a slight incision of the iris: care should be taken that the incision in the cornea should be at a little distance from the line of junction with the sclerotica, so as to diminish the chance of the escape of a portion of the iris through the wound, although, if too far removed, there will be an equal danger that the aperture will be too small for the escape of the lens.

Inexperienced operators sometimes introduce the point of the knife in such a manner as, instead of perforating the anterior chamber, merely to pass it between the laminæ of the cornea. To obviate this occurrence, we are usually advised to direct the knife, in the first instance, as if we were about to carry it into the pupil; and then, so soon as the punctuation is effected, to pass it transversely across the anterior chamber. It is well for the young surgeon to keep this in view; but he who is accustomed to the performance of this operation may safely disregard the recommendation.

The requisite incision into the cornea having been effected, the most important part of the operation is completed. On the removal of the knife all pressure on the eye must instantly cease, and the lids be allowed gently to approximate; a few minutes' rest being permitted to the patient, the lids are again gently separated, when the curette is to be passed beneath the flap of the cornea into the pupil, and the capsule gently lacerated by it, so as to facilitate the egress of the lens; the instrument being withdrawn, and another short pause given, the eyelids are again separated, and gentle pressure made upon the globe with the end of the scoop, when the lens is usually perceived protruding through the pupil and out of the wound of the cornea, when the operation is ended.

When the different stages of this operation are passed through with the regularity and order which I have indicated, nothing can be more agreeable and satisfactory to the operator, and the bystanders wonder where the talked-of difficulty in its performance lies. Various deviations, however, are not unfrequently witnessed, which either complicate the proceedings, or render uncertain the result of the operation.

Sometimes there is considerable difficulty, after the incision of the cornea has been effected, in causing the expulsion of the lens; this will, in most instances, be owing to the insufficient extent of the incision, when it becomes necessary to enlarge the wound, which is most easily effected with a pair of small, angular-shaped scissors. Various other instruments, as before stated, are employed for the like purpose. Jaëger's knife seems also well adapted for this end; it consists of a common extraction-knife, covered with a silver shield: after having been introduced between the cornea and iris, the shield being withdrawn, the knife is exposed, and a further incision is made in the margin of the cornea. It is always advisable, when practicable, to avoid having recourse to these additional instruments, since the chance of success commonly depends upon the greater or less amount of injury inflicted upon the organ during the operation; sometimes, when the incision appears to have been sufficiently ample, failure will occur from the lens rather receding into the vitreous humor than advancing through the pupil, when pressure is made upon the globe, probably from want of firmness in the vitreous body, and occasionally, perhaps, from strong action of the sphincter of the iris. In such a case, the introduction of an iris-hook, so as to transfix the lens and withdraw it through the pupil and wound of the cornea, is sometimes practicable.

On the other hand, it now and then happens that the lens flies out immediately on the completion of the section of the cornea. This, which, to the inexperienced, might appear a fortunate and favourable circumstance, is often found in the sequel just the reverse, because it implies a certain amount of disorganisation of the crystalline and vitreous humors and their capsules; for, in the healthy state, there is a considerable degree of adhesion between the two bodies, which prevents the displacement of the lens, without a previous laceration of the capsule, and a subsequent attempt at expulsion of the lens itself from its natural situation: the case is still worse, if, in addition to the immediate escape of the lens, a large quantity of the vitreous humor should also be discharged, and this be followed by a considerable collapse of the tunics of the eye. If there should be hæmorrhage from the interior of the globe come on afterwards, the case may be regarded as absolutely hopeless. These untoward events, though not necessarily fatal to the success of the operation, except the last, render it a matter of very doubtful character.

More commonly, the vitreous humor does not escape in any great quantity, until attempts at the expulsion of the lens are made by the introduction of the curette and the employment of pressure on the globe. When it escapes in this manner, it is, perhaps, of less importance than when it occurs immediately after the incision of the cornea, and accompanying the lens itself. Disorganisation of the humors, though sometimes indicated by a soft, boggy feel of the eye, is not always ascertainable prior to the performance of an operation, or otherwise it would be an insuperable objection to that of extraction.

In some rare cases, the difficulties of the operation appear to be absolutely insurmountable, the vitreous humor escaping in great

quantities, the lens receding, the tunics collapsing to an extreme degree, the patient highly irritable, and the motions of the organ perfectly uncontrollable. In these circumstances, which, however, rarely happen, except when the incision has been too small, the continuance of the attempt to remove the lens is sometimes unadvisable; and there is still a chance that the wound of the cornea may heal favourably, the vitreous humor be regenerated, the displaced lens ultimately become absorbed, and some degree of vision restored.

If there be any protrusion of the iris after the completion of the operation, gentle friction upon the eye through the lid, or a strong light directed upon the organ, will usually cause it to recede. If the same accident occur some time after the operation, it can only be treated on the general principle before laid down, when speaking of wounds and ulcers of the cornea.

After the operation of extraction, it is essential that the organ be kept as nearly as possible in a state of absolute repose for several days, or until the wound of the cornea is united, and any subsequent inflammation removed. The apartment in which the patient remains should be kept cool, the light excluded, and the horizontal position maintained, until all risk of inflammation has passed away. With respect to dressings, some practitioners merely apply a wet rag upon the eyelids, which is secured by a bandage passed around the head and face; others are in the habit of applying strips of adhesive plaster over the eyebrows, lids, and cheek, so as to keep the palpebræ closed, and to prevent the involuntary winking movements irritating the organ. Any plan which best secures this last object ought to be preferred. This may in general be easily accomplished, either by the use of adhesive strips, or a compress of soft linen secured with a light bandage passed around the head and over the eyes, and reflected under the chin and over the top of the head. It is better not to remove the dressings, except there be something peculiar in the case, until the expiration of three or four days after the operation, so as to favour union by the first intention; but, if the patient complain much, it may be necessary to examine the eye at an earlier period: this, whenever done, should be effected with the greatest possible gentleness, so as to prevent any irritation of the organ. If active inflammation supervene, it must be combated by vigorous antiphlogistic treatment, including general and local bloodletting, spare diet, the use of evaporating and sedative lotions to the organ, and the like, modified according to peculiarities of age, sex, constitution, and other circumstances.

I will now, in concluding this lecture, briefly mention two or three cases by way of illustration, which will afford you some idea of the variable success you may expect to meet with in the performance of the operation of extraction.

Case 1.—Mrs. H——, in the 88th year of her age, had been blind for a period of eight years. On examining her eyes, nothing unusual was discovered, with the exception of a white, diffused, pearl-like opacity immediately posterior to the pupils, which are perfectly active, the case being evidently one of capsulo-lenticular cataract. On being informed that there was a probability of a restoration of sight by an operation, she was very desirous that it should be performed. It seemed doubtful if this was a suitable case for extraction, considering the advanced age of the patient, the existence of a broad arcus senilis, a somewhat flat cornea, and a rather sunken eye. Uncertain as to what operation I should attempt, I ordered the belladonna to be applied over night, which had the effect of producing a full dilatation of the pupils. As she appeared very steady and unconcerned, I decided upon extraction. The patient being placed on a sofa, opposite the window, her head raised with pillows to a convenient height, I seated myself behind her. Securing the upper lid with my left hand, and the extraction-knife in my right, I proceeded to make a section of the margin of the cornea in its upper half, which was accomplished in the usual manner and without any difficulty, the patient being perfectly composed, and the eye remaining steadily fixed. After two or three minutes' pause, the curette was introduced through the pupil, which was now perfectly contracted, and the capsule slightly lacerated. Another short pause, and the scoop was gently pressed upon the eyeball, when the lens, which was of a deep amber colour, immediately started out through the pupil and wound of the cornea. The lids were then secured with strips of adhesive plaster. Finding that the patient had been so remarkably steady, not having made a single exclamation or complaint, I proceeded to the repetition of the operation on the other eye, with no other difference than securing the upper lid with the right hand, and making the section of the cornea with the left. Not a drop of vitreous humor escaped from either eye, and no difficulty occurred in any part of the proceedings. She recovered remarkably well, scarcely any inflammation having come on. In the left eye, a prolapsus of the iris appeared, which, after a few days, was touched with the nitrate of silver, and finally subsided, the pupil being drawn slightly upwards. It was impossible to confine her to bed more than four days, and, at the expiration of about a fortnight, she was able to use her eyes, and found her vision very completely restored. It is now upwards of two years since she underwent the operation, and her sight is such that, with the aid of convex glasses, she can read the smallest newspaper type with the utmost facility.

Case 2.—M. L., æt. 78, had lost the sight of both eyes for a period of twelve months. The lens in both was evidently opake, of a whitish colour, and radiated appearance; the irides active, and the eyes generally healthy, with the exception of the arcus senilis. She was admitted into the hospital a few days prior to the period fixed for operation, during which time mild aperient medicine was occasionally administered, and her diet regulated. The operation decided on was extraction. She was placed on a sofa in the usual manner. Seated behind the patient, I commenced with the right eye: the orbits projecting considerably, it was difficult to fix the superior lid, or to make sufficient pressure on the globe to steady it; the patient was also exceedingly irritable, and very much in dread. Attempting to push the cornea-knife across the anterior chamber, scarcely was the punctuation effected than the eye rolled upwards under the superior lid. Having in some measure returned it towards the centre of the orbit, and without removing the knife, I succeeded in reaching the opposite margin of the cornea, but, as anticipated, at too high a point to effect a sufficient aperture for the escape of the lens. After a short pause, however, the curette was passed through the pupil, and the capsule gently lacerated; but, on making pressure with the scoop, the escape of a considerable portion of the vitreous humor showed clearly that the discharge of the lens could not be effected. The incision in the cornea was then enlarged downwards and outwards, with a small pair of scissors, to the extent of about three lines. The eyeball was now so flaccid that pressure seemed unlikely to cause the escape of the lens, and a small iris-hook was next introduced through the pupil, and the cataract transfixed and brought out, and the operation completed. The lids were then secured with strips of court-plaster.

Having succeeded thus indifferently with the upper section of the cornea in the right eye, and with the use of the right hand, I considered that I should not be justified in attempting the same process on the other eye with the left hand; I therefore determined on making the lower section in this eye. Seating myself in front, the patient retaining her position on the sofa, I proceeded to the operation on the left eye. The tendency of the eye to roll upwards was now, to a certain extent, counteracted by the knife commanding it in cutting out in the opposite direction. The incision was effected without difficulty; it was sufficiently ample, as proved by the ready escape of the lens, on slight pressure being employed after laceration of the capsule. The lower and outer border of the pupillary margin of the iris, the pupil having been dilated by belladonna, was caught by the point of the knife, in traversing the anterior chamber, and a small portion of it partially separated, which was afterwards snipped off with scissors as it hung out of the wound. The success of this case was partial. The eye last operated on perfectly recovered, the pupil being somewhat irregular, but vision as good as it ever is after cataract; the other was the subject of severe inflammation, which continued for several months, leaving a dense opacity on the outside of the cornea, corresponding with the line of the incision, particularly that portion which had been effected by the scissors; the pupil, also, remained nearly closed, and there was but a very small amount of vision.

Case 3.—A. C., æt. 64, had been the subject of cataract for several years; the left eye was the first to be rendered useless, and the operation for depression had been performed upon it, by an eminent surgeon, two or three years since. This operation had failed, the eye having been subsequently affected with deep-seated inflammation, terminating in general disorganisation. The right eye had been gradually getting darker, and he was at length unable to follow his employment, although still retaining some degree of sight. The lens was of a brownish, amber colour, particularly towards the centre; the capsule transparent, the opacity being seated at a little distance behind the pupil, displaying the dark shadow cast by the iris on the cataract; the motions of the pupil were tolerably active, and there was no evidence of any affection posterior to the lens, the eye having a plump, healthy appearance, and possessing the natural degree of firmness. He was himself desirous that the operation of extraction should be resorted to, and applied to me to know if I were willing to operate. Seeing nothing to contra-indicate extraction, and having the bad success of the previous operation in view, I undertook the performance of it, although with some foreboding as to the result. The patient being placed on a sofa, as in the other cases, I proceeded to make the upper section of the cornea. No difficulty was experienced, the patient being very steady. The operation was completed in a very few seconds, for the moment the incision was effected, the lens was observed lying on the outside of the eye, and with it a very large quantity of aqueous fluid, evidently the disorganised vitreous humor. The front of the eye exhibited a large concave depression, having the appearance as if it had been completely emptied. There had been no spasmodic action of the muscles, nor any undue pressure on the globe; the catastrophe was evidently the result of dissolution of the vitreous body, a condition which had not been anticipated from the symptoms. The lids were approximated, and kept together by adhesive strips; the patient was directed to remain for three or four hours on the sofa, and then to be removed cautiously to bed. When I saw him on the following morning, I was astonished to find streaks of blood, which were now

perfectly dry, and which had evidently trickled down from the eye over the face and neck in several streams, and in such quantity as to stain the shirt-collar very considerably. This, it appeared, had occurred in the afternoon or evening after the operation. On separating the lids, the cornea was seen to be covered with a coagulum of blood. As the bleeding had ceased, I did not interfere with the eye, but reapplied the dressings. The next day, the hæmorrhage was found to have come on occasionally, and run down the face as before, and, indeed, continued at intervals for nearly a fortnight. The eye itself was, for the first two or three weeks, considerably inflamed, the inflammation being of the erysipelatous character. Seeing that no treatment could be of any use, I merely kept the plaster-dressings on the lids, and directed the eye to be bathed with warm water whenever they were removed. The inflammation gradually subsided, and with it there was a general shrinking and atrophy of the globe, and vision, of course, destroyed. The source of the hæmorrhage I am at a loss to account for, but suppose that it must have arisen from the central artery of the retina, which, after the evacuation of the humors, was left unsupported, and probably gave way, having been, perhaps, previously the subject of some morbid change: certainly no injury was inflicted on any texture during the operation, which could have given rise to it. The case is a very uncommon one, and, as far as I know, unique: but Mr. Tyrrel relates two cases where hæmorrhage occurred afterwards; in these, however, it appeared to be caused by the employment of an hook to extract the lens.

LECTURES

ON THE

ORGANS OF REPRODUCTION IN THE ANIMAL KINGDOM.

DELIVERED IN THE ROYAL COLLEGE OF SURGEONS, LONDON.

By Professor OWEN, F.R.S.

LECTURE XXI.—June 6, 1840.

The ovum of the bird probably undergoes the same changes with those already described, as occurring in mammifera. The germinal vesicle becomes flattened in the same manner, and the germinal spot obscured. It has been supposed that this spot was lost, but that is not the case, it is only obscured by the development of the numerous nucleated granules, which render the contained fluid opake. The layer of granules which surrounds the flattened germinal membrane, is that which has been called, by Von Baer, the discus proligerus. We may infer from analogical reasoning, that the ovum of birds, which presents so many points of resemblance with the ova of mammifera, pursues the same steps in progressive development. A great body of information, relative to the development of the ova of mammalia, has been collected by able physiologists, which serves the purpose of aiding the investigator in those researches for which the clear and transparent, although minute, ovum of mammifera is best adapted. The succeeding series of changes are best pursued in the Frog, from the great number of their ova, and the facility with which they may be obtained. The German writers upon embryology divide the processes of development into two parts, the histological and morphological. By *histological* is meant the production of the primitive cells, and the conversion of those cells into a primary and formative tissue. *Morphological* relates to the process by which the various tissues of which the body is composed are formed and distributed. The first step in the process of development is the aggregation of those mysterious nucleated cells. Botanists have observed a parallel change in the growing sporules of cryptogamic plants; the production by this means of a primitive and formative tissue, and the after development of the vegetable tissues from this original structure. Physiologists have traced the formation of cells of an essentially similar nature as the earliest step in the development of the ovum in the animal kingdom. These cells constitute an elementary tissue, out of which the various systems, the osseous, the muscular, the nervous, &c., are produced. Mr. Owen would assume, as a fit comparison, the arrangement of the materials which are prepared for the erection of a vast city. The architect, in the first instance, subdivides that material, and fashions it into the form which is best adapted for his purpose. Of these elementary pieces some may be taken to build the humble shed, which is intended to serve but a secondary and a temporary purpose; while pieces of the same kind, and from the same heap, are to form the elegant proportions of the most magnificent palace. It is in this way that we see the primitive nucleated cells produced by the most mysterious and unfathomable laws; these, by a remarkable change, are resolved into two, in which the formative power of the whole seems concentrated; to these four, eight, sixteen, and incalculable subdivisions succeed: and from these countless particles the morphological combination is effected, which may produce the simplest infusory, or the most complicated mammal.

After the ovum of the bird has gone through the various changes by which it arrives at perfection, it bursts through the stigma of the calyx of the ovarium, and is received through the slit-like opening of

the oviduct into the canal of that tube. In the oviduct the vitellus, with its investing membrane, is surrounded by successive layers of albumen, which are at first dense, but afterwards become more and more fluid. The first layer formed is so dense in structure as to constitute a membrane, to which are attached four twisted and spiral processes of denser albumen, called *chalazæ*. The last secreted layer is still more dense in its structure; it incloses the whole of the albumen, and lines the interior of the shell; hence it is named the membrana testæ, or membrana tutaminis. It is analogous to the chorion of mammiferous ova. The chalazæ, four in number, and situated in pairs towards each extremity of the egg, are attached by one extremity to the membrane which immediately invests the membrana vitelli, the membrana chalazifera, and by the other to the membrana testæ. Further on, the internal surface of the oviduct presents a peculiarly laminated appearance, and is extremely vascular. It is here that the calcareous covering of the egg is secreted; being deposited, as proved by the observations of Purkinje, in minute crystalline particles. After the exclusion of the egg certain changes occur in its structure; the membrana testæ, at the large extremity, becomes separated into two layers, and contains air. This cavity is called the vesica aeris. Mr. Towne has observed, that if air be forcibly impelled into this chamber, the air will find its way all around the egg; and it may thus be demonstrated that the membrana testæ consists of two distinct layers. If an egg be boiled hard, and then be divided by a longitudinal section, a whitish and circular spot will be seen in the centre of the yelk; and leading from this, towards the surface, is a line of the same hue. The central spot indicates the original position of the germinal vesicle, with its proligerous membrane; and the whitish line, the route which it has taken to reach the periphery of the vitellus, where it forms the cicatricula, or, as it is vulgarly called, the tread. The whitish matter, which marks the trace of this course, is composed of nucleated cells, of smaller size than the granules of the vitellus. The cicatricula is always situated upon the highest point of the periphery of the yelk, so as to be nearest to the warmth of the parent bird during the period of incubation. This peculiar position is ensured by the extreme lightness of the yelk, and by the mode of attachment of the chalazæ, which, being connected with the chalaziferous membrane below the central axis of the yelk, the largest half necessarily floats the highest on whichsoever side the egg may be placed.

The calcareous covering of the egg of the bird presents numerous varieties, referrible in many instances to beautiful final causes. Thus, in the Emu, which deposits her egg in shady places, and amidst surrounding verdure, the colour is a deep brown, or black. But in the Ostrich, whose eggs are left upon the arid sands of the desert, they present that yellowish tint which might best elude the search of depredators.

We now come to the porosity of the shell of the egg; a property which we have hitherto looked upon as a necessary condition for the transmission of air, with its vitalising component oxygen, to the embryo chick during incubation. The question relating to this subject was made the subject of experiment so early as 1810, by Erdmann, who constructed a machine by means of which he succeeded in procuring a certain amount of development, with the assistance of artificial heat, after he had, as he thought, completely excluded the atmospheric air. These experiments, however, he was so much dissatisfied with himself, that he neglected their publication, and they were generally objected to as open to much doubt, from the circumstance of the material used for the exclusion of the air having been plaster of Paris. Subsequently they were published by Oken, in the "Isis," and have since, strange to say, been copied by Rudolph Wagner; although he must have been aware that much better and more philosophical observations had been made. The subject has lately been revived by Mr. Towne, and the experiments by this gentleman have been recently published in the Guy's Hospital Reports. Conceiving that the paint and varnish used for the exclusion of the air in the experiments formerly made, might have an injurious effect upon the embryo, he surrounded the eggs under examination with a number of strips of thin but dense paper, steeped in albumen; and after making a firm and apparently impermeable case, he varnished or painted the envelope on the exterior. Under these circumstances he found that the changes produced by incubation went on, in an undisturbed manner, to the twelfth or thirteenth day, and the allantoid membrane was perfectly formed. He thought, therefore, that he had succeeded in proving that development could proceed with an entire absence of air, or with only so much as was contained in the vesica aeris, which is known at the period of incubation to contain more oxygen than the atmospheric air. But this reasoning was most imperfect, and had for its basis a postulate, a mere assumption. He should have proved his premises. We do not want theory; we want direct and incontrovertible proof. With the view of pointing out the inaccuracy of Mr. Towne's experiments, Mr. Owen applied to Mr. Taylor, who immediately suggested several modes by which this could be effected. One of these was to make an opening at one extremity of the shell, with its investing case, prepared by Mr. Towne, to remove its contents, and to introduce into its cavity a solution of acetate of lead. The opening was then carefully luted and hermetically closed,

and exposed to the influence of sulphuretted hydrogen. Now, supposing that in this experiment the external case were capable of wholly excluding the passage of air, no effect would be produced upon the contained solution of lead. But if, on the other hand, it were permeable, deposits of sulphuret of lead ought to be found in the interior of the shell. (Mr. Owen then opened an egg, submitted to this process, and three considerable patches of black pigment were discovered upon the internal surface of the shell.) The sulphuretted hydrogen has, moreover, a peculiar effect upon the albumen employed in the process of agglutinating the layers of paper which compose the investing case; it is rendered yellow; and Mr. Owen, in examining the successive layers of paper, found them all yellow, even to the surface of the shell; a proof that the gas must have found its way through these different layers to the inclosed egg.

These experiments, however, together with some of a more complete and satisfactory nature made by Dr. Theodore Schwann, tend to the conclusion, that development can proceed, to a certain extent, after the partial removal of atmospheric air, and serve to show that the porosity of the shell does not enjoy the function it has been hitherto thought to possess. Dr. Schwann constructed a machine with which he could keep up the artificial heat necessary for incubation, and at the same time effectually exclude the air, or he could surround the eggs with azote or with hydrogen. In these cases he found the usual developmental changes to take place. But when the eggs were submitted for a period of four-and-twenty hours to the influence of carbonic acid gas, their vitality was completely destroyed. Humboldt performed the same experiments, many years since, upon the seeds of plants, and with precisely the same results.

When eggs have been incubated by the parent hen, for a certain length of time, or have been subjected to the regulated temperature of artificial heat, the cicatricula is observed to increase in size, and present a whitish, opake disk upon the surface of the vitellus, and immediately beneath the vitelline membrane. This enlargement takes place by the increase in numbers around the circumference of the disk of the nucleated cells. In the centre of the cicatricula is a clear space, which is called the area transparens, and the opake disk surrounding the area transparens is the area opaca. Beyond the area opaca the opacity gradually diminishes, and a number of concentric circles, or halones, are perceived. At the eleventh or twelfth hour of incubation, a stratum of nucleated cells is formed over the surface of the cicatricula, and immediately beneath the membrana vitelli. This is the commencement of the amnios, or, as it has been called by the German writers, and particularly by Pander, the serous layer of the germinal membrane. A similar layer is then produced upon the under surface of the cicatricula, in contact with the yelk; this is the mucous layer of the germinal membrane; and between these two layers the common embryonic cells are collected. Very soon an opake, linear streak may be observed traversing the area transparens; this streak is shortly discovered to be composed of two white and opake parallel lines, which represent the two lateral halves of the spinal cord. This is the first part produced during the progress of the development of the embryo of the Fowl.

Immediately external to this primitive trace a parallel line may be soon after seen on either side; and immediately beneath it, that is, upon its vitelline surface, a third line, which represents the chorda dorsalis. In the two lateral striæ, or laminæ vertebrales, at about the eighteenth or twentieth hour, a double row of opake points may be discerned; this is the first step towards the ossification of the vertebral column; and the parts in which the ossific deposit commences, are the rudiments of the superior arches of the vertebræ. The chorda dorsalis is afterwards transformed into the bodies of the vertebræ. The next changes which occur are the divergence and approximation of the two parallel cords near to one extremity, so as to include between them three unoccupied spaces. The first of these spaces corresponds with the future position of the olfactory ganglia; the second with the optic ganglia; and the third with the medulla oblongata. At about the second or third day two small capsules are developed from the sides of the medulla oblongata at its upper part; these are the rudiments of the organs of hearing. Another pair of vesicles are soon after produced from the sides of the middle ganglia, which soon indicate, by the collection of pigment which ensues, the formation of eyes; and a third pair from the anterior ganglia become developed into the nasal fossæ. Near the posterior part of the primitive trace, a space exists between the parallel cords, which remains permanently in birds, under the name of sinus rhomboidalis. This point corresponds with the numerous nerves which are intended to supply the lower extremities.

Around the circumference of the area opaca, little spots, of a yellower and darker tint than the surrounding nucleated cells, are perceived; these seem to be produced by a liquefaction of the granules. Speedily afterwards these small spaces increase in size, the fluid which they inclose assumes a deeper colour, and is observed to contain numerous minute granules, which become gradually converted into the elliptical form of the blood-disks of the bird. The little lakes increase in size, become confluent, and then form a circular channel, the sinus terminalis, which extends completely around the area

opaca. From this sinus smaller channels are observed shooting towards the centre, and converging towards the embryo. These cells and canals were observed by Hunter, before the contained fluid assumed the red colour of blood, by absorbing from the exterior the salts of iron which bestow this pigment. It is remarkable that in all the coloured parts of the body the colouring matter is contained within closed cells; a disposition that reminds us of the circular cells which contain the peculiar oil in the peel of the orange, or even of the membranous sacs in which the juice of the fruit is retained. These cells of the area opaca possess, therefore, in the first instance, a secreting power by which the blood is produced; the sinus venosus is then formed, and subsequently the converging canals tend from the circumference towards the embryo.

In the early formation of the lineaments of the embryo upon the periphery of the vitellus, it is soon covered upon the surface by the newly-developed amnios. In the next place it becomes curved upon itself, particularly near the cephalic end, and sinks into the amnion, so as to obtain an additional and reflected investment. In the early part of this change a duplicature is observed near the head of the future embryo, which has been denominated the plica transversalis cephalica. Between the head and the thorax, in consequence of the curve which the embryo now makes upon itself, a small cavity is formed, which has been named by Wolff the fovea cardiaca. It is here that the blood from the converging vessels of the sinus venosus is centralised, and forms a single-looped vessel curved upon itself. On the second day pulsations are observed in this vessel, or punctum saliens, which shortly divides into three parts,—an auricular portion, a ventricular dilatation, and a bulbus arteriosus. In two or three days the aorta gives off at either side a series of arches, which resemble the branchial arches. There are never more than three of these arches, although Wagner has seen four, and five have been described. The anterior arch becomes the carotid and subclavian artery at each side; the middle forms the aorta, and the posterior the pulmonary arteries, after they have been diverted from their connection with the aorta by the development of the lungs. The next changes which take place in the heart, are the separation of the auricle and ventricle into two lateral cavities by a median septum. The circulation at this period is performed by two arteries, one at each side, which go off from the aorta near to its lower part, and by two veins which return the blood to the heart, and are ultimately transformed into the venæ azygos. These have been incorrectly called arteries; Hunter looked upon and figured them as veins, and his view has been since proved by repeated observations.

DERBYSHIRE GENERAL INFIRMARY.

CASES,

SHOWING THE EFFECT OF

HYDRIODATE OF POTASH

WITH

SARSAPARILLA AND ALTERATIVE DOSES OF MERCURY, &c.

By JAMES HEYGATE, *M.D.*, *M.R.C.S.*,
Physician to the Derbyshire General Infirmary.

I.—CHRONIC RHEUMATISM.

ELIZABETH HOLMES, ætat. 43, admitted in-patient Aug. 21st, 1837. Pain, with loss of power in the lower extremities; knee-joints much swollen, and have been so for many months, with inability to stand; pulse quick, tongue clean, bowels confined. She says various means have been used, but hitherto without any effect.

℞ *Hydriodate of potash*, gr. vj;
Compound decoction of sarsaparilla, ℥ij.
To be taken three times a-day; and a pill, composed of extract of rhubarb, extract of conium, and blue pill, of each two grains, every night.

23. The same. A vapour-bath to be used every other day, and the turpentine liniment to be applied to the limbs.

28. Improving. Increase the hydriodate of potash to eight grains.

30. The medicine agrees very well; the joints not so stiff, less painful, and less swollen. To have crutches.

Sept. 6. Limbs more pliable. Increase the hydriodate of potash to ten grains, and substitute the camphor liniment for the turpentine.

23. Has continued improving since last report. Increase the hydriodate of potash to fifteen grains.

27. Gums slightly turgid. Omit the pills.

30. Joints reduced to almost the natural size. Can now walk about tolerably well. To be made an out-patient, and gradually leave off the medicine.

II.—Sarah Walker, æt. 52, admitted June 11. Rheumatic gout of two years' standing; joints swollen; pulse quick; tongue furred; bowels confined; appetite "not amiss" till within the last fortnight, since which she has had more pain; urine scanty and light-coloured. Low diet. A vapour-bath to be employed every other day.

℞ *Calomel*, gr. iv;
Opium, gr. ¼.
Make into a pill, to be taken every night.

℞ *Hydriodate of potash*, gr. v;
Compound decoction of sarsaparilla, ℥ij.
To be taken three times a day.

16. The symptoms are somewhat relieved already.

25. Bowels confined. Omit the pills, and take two or three grains of the compound rhubarb pill when necessary.

27. On inquiring carefully into the history of this case, we find that it has been a peculiarly obstinate one. Increase the hydriodate of potash to gr. viij. Use the turpentine liniment.

30. Complains of great debility. Omit the baths. Let her have a pint of porter daily.

July 9. May be considered, on the whole, a little better. Can move the limbs rather better, and she is recommended to use them as much as possible. Nights sleepless and painful.

Aug. 6. This case has been progressively, though slowly, improving since last report, and is now convalescent.

III.—Secondary Syphilis.

Ann Gross, æt. 31, admitted Sept. 3. Nodes on the scalp, which has become partly denuded of hair; has violent venereal, or mercurial, pains in the head of a most intense character, and the stomach so far sympathises that she has not been able for some time to retain anything upon it. Is much reduced in flesh, and has an extremely anxious countenance; married; no family; catamenia interrupted; is now under the influence of mercury. Vows herself that she has never had the venereal disease; but the symptoms are too well marked to be mistaken. This is a long-standing case, and from the account she gives, have reason to suppose she has been frequently mercurialised. A seton to be made at the back of the neck.

℞ *Castor oil*, ℥j;
Tincture of opium, gr. vj.
To be taken every morning.
℞ *Hydriodate of potash*, gr. ij;
Compound decoction of sarsaparilla, ℥ij.
To be taken three times a-day.

8. Says she feels in all respects much better. A linseed poultice to be applied to the swellings.

12. The improved appearance in this case has been most marked; stomach retains the food, and the appetite is good.

17. Complains of oppression at the stomach, probably from eating too much. From looking the most deplorable object, the countenance begins to assume the hue of health. Tumours gradually subsiding. Omit the castor-oil and poultices. Let her take one or two grains of the compound rhubarb pill every night. Continue the decoction of sarsaparilla.

Oct. 3. Has been improving daily since last report, and may now be considered quite convalescent.

This patient we saw a few months after; she had continued well, and grown fat. No return whatever of the symptoms, though the seton had been dried up a month.

We have seen many cases of secondary syphilis, especially eruptions of a mercurial character, or partly mercurial and partly syphilitic, in which the hydriodate of potash has acted like a charm.

Probably in the above case, which, from long continuance, and latterly from its violence, had worn our patient to a mere skeleton, the seton was a powerful auxiliary; it was instituted on account of the extreme pain in the head; and we cannot think, from the previously obstinate state of the sickness, that the stomach would have been so readily tranquillised without it.

We hesitate not to say that, in former years, the injudicious use of mercury in syphilis occasioned more harm than the disease itself; and though we should be sorry to trust to any system of treatment, especially in the primary symptoms, short of a gentle course of mercury, we certainly think that if ever there were a remedy equally efficient, it is the hydriodate of potash with sarsaparilla.

IV.—Severe Affection of the Wrist-Joint.

Emily Jefferel, from Burton-on-Trent, æt. 20, was admitted in-patient Sept. 24. Strumous habit; was seized three weeks ago with violent pain in the wrist (whilst in bed); it was said to be rheumatism by the medical attendant; presents now all the characteristic symptoms of incipient disease of the joint, which is much enlarged, with exquisite tenderness on pressure; great looseness in the joint, with slight grating; œdema of the hand and fingers; no more constitutional derangement than such a local affection, attended with such severe paroxysms of pain, would necessarily generate. Has been leeched, &c. Low diet.

℞ *Liquor ammoniæ acetatis*, ℥iv;
Spirit of wine, ℥ij;
Camphor mixture, ℥x.
Make into a lotion. To be used warm to the wrist.

The compound iodine ointment to be well rubbed into the forearm night and morning.

℞ *Oxymuriate of mercury*, gr. j;
Compound decoction of sarsaparilla, lb.
Half a pint to be taken daily. House physic every other day.

27. The same; no other joint affected, and the pain, which is acute, is confined to that part. Apply twelve leeches, and after their removal a blister.

Oct. 1. The same. Omit the mixture.

℞ *Hydriodate of potash*, gr. xij;
Compound decoction of sarsaparilla, lb ss.
An ounce and a half to be taken three times a-day.

3. The swelling in the wrist decidedly less, and, on the whole, the case wears a more favourable aspect; the pain, however,

is still most severe; the hand has been placed upon a splint.

A large blister to be applied to the arm, and a fomentation of poppies to the wrist night and morning. Six leeches to the wrist.

℞ *Calomel*, gr. ij;
Opium, gr. j.

A pill to be taken every night. Continue the medicine and ointment.

6. Always much relieved by the leeches and fomentation. Omit the lotion.

Let twelve leeches be repeated, and the fomentation constantly used.

8. If the pain should not be relieved by the fomentation, let the hand be enveloped in a large linseed poultice.

The compound iodine ointment now to be applied to the hand itself.

15. Better. Repeat twelve leeches.

22. Tumefaction gradually subsiding.

Nov. 5. Little or no swelling or tenderness now in the wrist, though the hand is remarkably helpless. Let her gradually use her fingers, and, as a safeguard against a return of the inflammation, it would be advisable to make an issue; let one accordingly be made at the insertion of the deltoid muscle.

Dec. 1. Convalescent. To have meat daily.

Remarks.—It was some months before she acquired the perfect use of the hand; in fact, before absorption of the fluid in the joint took place. The carpal bones seemed separated from the ulna and radius, which gave that loose feeling in the joint, which even continued for some time after all swelling had subsided.

V.—Affection of the Heart.

Joseph Walker, æt. 52, admitted Nov. 5, 1838. Pain in the region of the heart of four months' duration; pulse 110, and slightly intermittent; sound of the heart louder than natural, with slight "bruit;" respiratory murmur natural and distinct over the chest; no cough or dyspnœa, except when walking up hill; appetite good; general health not materially implicated at present; urine not scanty. Common diet. A blister to be applied to the region of the heart.

℞ *Powder of digitalis*, gr. xij;
Blue pill, gr. vj;
Powder of squills;
Extract of conium, of each, ℈j.

Mix, and make into twelve pills; of which let one be taken every six hours.

℞ *Hydriodate of potash*, gr. xij;
Compound decoction of sarsaparilla, ℥xij.

Mix. Let one-sixth be taken every night and morning.

18. From the notes we find that this man continued improving; the blister was repeated on the 15th. The note of to-day is—pulse natural, in every respect going on well.

21. Gums tender. Omit the pills.

26. Discharged, cured.

Joseph Walker was admitted again on March 4, 1839, with a return of the same affection of the heart, which, he says, was produced "by taking cold, as I was well for some weeks after leaving the house, and grew fat." He, however, has now a somewhat anxious countenance, is reduced, and the symptoms are rather more urgent than when admitted before. A blister to be applied to the cardiac region, and the medicines of November the 5th to be repeated.

14. Much better; looks himself again, and is gradually gaining flesh. Apply a plaster of tartarised antimony to the cardiac region.

26. Discharged, cured.

August, 1840. This man has not made his appearance since; but we have generally found where there is a strong tendency for diseased action of the heart to occur, that the symptoms are extremely liable to return, so much so, indeed, that it is very rare that any permanent cure is effected. This is more particularly the case when we have effusion into the cellular tissue, or symptoms of hydrothorax. Even, however, where these formidable symptoms present themselves, we have frequently in private as well as hospital practice found them completely arrested by counter-irritation, with the above plan of medicine.

VI.—Neuralgic Affection in the Loins, *with loss of power in the Lower Extremities.*

Thomas Kirby, æt. 32, admitted in-patient Nov. 5. Was seized last Christmas with violent pain in the lumbar region whilst stooping, which, he says, has continued ever since; has not the perfect use of his limbs, especially the right leg, which is very much benumbed; spinous processes of the dorsal vertebræ protrude unnaturally, but no tenderness on pressure; the pain is lower down; appetite good; slight cough, with expectoration. Common diet. A small caustic to be made on each side of the lumbar vertebræ.

℞ *Liquor arsenicalis*, ℥ij;
Camphor mixture, lb ss;

An ounce to be taken three times a-day; with four grains of quinine in the form of a pill. A hot bath at night.

7. Less cough and dyspnœa; slight febrile excitement; less numbness. Let the bowels be freely relieved every morning with house physic.

12. Has vomited a considerable quantity of bile, a circumstance frequently observed whilst taking arsenic; less uneasiness altogether, and rather more power in the limbs, but too much excitement in the system.

℞ *Blue pill*, gr. vj;
Powder of digitalis, gr. xij;
Powder of squills, ℈j.
Mix, and make into twelve pills. One to be taken three times a-day.
℞ *Hydriodate of potash*, gr. xij;
Compound decoction of sarsaparilla, ℥xij.
Two ounces to be taken night and morning.

18. Going on remarkably well.

24. The opium liniment to be rubbed into the part affected.

29. Complains of more debility, in other respects no complaint. Omit the medicines. An ounce and a half of decoction of bark with acid, to be taken three times a-day.

Dec. 3. To have more bread and meat daily; to walk about. He was shortly afterwards discharged, cured.

ON THE

HÆMORRHAGIC DIATHESIS.

To the Editor of THE LANCET.

SIR:—That so alarming and remarkable a diathesis as the hæmorrhagic should exist, I am unprepared to question, never having encountered a constitution of such peculiarity, unless excessive hæmorrhage, consequent upon the extraction of teeth, is solely referrible to an influence of this formidable character. The occurrence of profuse bleeding after this operation, although rare, I believe to be more frequent than is stated by Mr. Smethurst, in THE LANCET of January 30th, and to be most generally dependant upon some *local accidental* cause, entirely unconnected with any hæmorrhagic diathesis. I do not doubt but that in such a system the extraction of a tooth would be attended with extreme or even fatal hæmorrhage; but it is essential that corresponding circumstances, in the biography of the individual, should be advanced, such as the result of the occasional incised or other wounds that are common to most in their ordinary vocations, and upon its development in females one might anticipate menorrhagia. In the absence of some connecting particulars, it is difficult to reconcile the existence of so fearful a predisposition from this single fact, which admitting of a different interpretation, is far more satisfactory if correct in its altered position.

I am acquainted with the history of two cases, analogous to those treated by Mr. Smethurst; and it is a singular coincidence that both were females, although of entirely opposite constitutions. I have the recollection, also, of a medical gentleman, of a robust, plethoric habit, who, many years since, when in the possession of health, bled to death from unrestrained hæmorrhage, after the extraction of a tooth. The possibility and suddenness of such a disastrous event, are sufficient reasons for wishing publicity to whatever means have been found most effective in preventing similar consequences.

The method suggested by Mr. Smethurst, to suppress the hæmorrhage, if such a period as three or four hours' compression be required, and that to be alone maintained by direct digital force engaging both hands, would be so difficult to practise if the socket were far in the mouth, and so tedious both to the patient and surgeon, that I am desirous of stating in what manner I believe such bleeding may be immediately controlled, not being aware of its adoption by Mr. Smethurst, or of its having been similarly applied in the fatal case alluded to.

Appended to this narration is an instance of profuse accidental hæmorrhage, which I witnessed in 1836, in the practice of my friend, Dr. Blomfield, of Falkingham, and in which the cause being visible, led me to conjecture the probable nature of hæmorrhage consequent upon the extraction of teeth; a problem that could only be positively solved by a minute examination of the socket in cases terminating fatally, especially those in which the diathesis was not conclusively established.

CASE 1.—An elderly lady, residing in this neighbourhood, of small stature, and very spare habit, but healthy, consulted me, in the morning of June 6, 1839, respecting the last molar tooth in the upper jaw, on the left side; she stated it was loose, and occasionally gave her pain, particularly if it chanced to antagonise any massive piece of food, or upon drinking a cold or hot fluid. The irritation produced by such occurrences was not permanent, nor sufficient to justify its removal, had it not felt so insecurely attached to the socket, and being near the throat, created an alarm that it might eventually escape into that receptacle. She had several times previously submitted to the operation without inconvenience, and a few years before had lost, by extraction, its fellow on the right side.

Upon examining the tooth, the crown appeared free from caries, and around its neck was encrusted a hard phosphatic deposition; it was unusually dependent, and so moveable, that I believe I could have extracted it with my fingers; the gum had receded with the alveolar process, so that it seemed thrust from its socket. Without lancing the gum, it was easily removed with a pair of curved forceps; scarcely a trace of blood was upon the fang, but its sides were coated with an offensive, soft, caseous matter, and the terminal fourth resembled clear cartilage, but was hard, and resisted an attempt to cut it. She washed her mouth freely with warm water, and there was very little admixture of blood evident.

At three o'clock the next morning, about fifteen hours after the operation, I was has-

tily summoned to attend her; she was in bed, leaning forward over a basin, into which blood was fast trickling from the mouth, and several other vessels were set aside, containing a strongly-coloured, bloody fluid. She told me with much difficulty, on account of exhaustion, that a slight hæmorrhage had continued from the afternoon until midnight, although she had constantly applied cold water, and drank every thing cool; at that hour, being unable to lie down in bed, and feeling sick and faint, she took a small quantity of spirit, which was speedily followed by an increased flow, that resisted pressure with a pencil-case upon pieces of linen, securely forced into the socket, &c. Upon carefully placing her, with a slight inclination backwards, she immediately choked, and it being night, and in the upper jaw near the throat, I had much trouble in obtaining a view of the situation of the hæmorrhage, which flowed as freely, with the pressure of my finger in the socket, as with the addition of small pledgets of lint, steeped in a saturated solution of alum. After an ineffectual trial of these means, I took a stick of nitrate of silver, rounded at the extremity, and firmly forcing it to the bottom of the cavity, allowed it to remain a few seconds in this situation; very little pain was expressed, and, upon its withdrawal, I was gratified in finding a complete cessation of the hæmorrhage. The mouth was kept open with a cork, for about half an hour, to admit air freely, and ensure the preservation of the clot, which might have been disturbed or removed by suction; she then took forty minims of opium and a teaspoonful of compound spirit of ammonia, and afterwards rested five or six hours. With the exception of the unpleasant *caprons* flavour communicated to all nourishment for the next few days, nothing was complained of but extreme exhaustion, which was many months in disappearing, although this lady very soon after went to the sea-side to recruit her impoverished system. She is not aware of possessing any hæmorrhagic tendency, and has occasionally received accidental wounds.

Case 2.—A lady, æt. 38, residing in this neighbourhood, of a naturally robust, plethoric habit, and subject to frequent bilious attacks, sent for me late in the evening of March 24, 1838, in consequence of an increasing hæmorrhage from the socket of the third molar tooth on the right side of the inferior jaw. She told me she was the patient of a surgeon of Brompton, who had extracted her tooth about ten hours before, that it had lately occasioned her swelling of the face, which terminated in a small abscess bursting in the mouth; the gum had been carefully lanced, and no difficulty was experienced in the operation; it bled freely at the time, and had nearly ceased in half an hour, when she discontinued washing her mouth. Towards the afternoon a slight return of bleeding was remarked on, which increased considerably by six o'clock, so as to require means to arrest its progress. Cold water, filling the cavity with pieces of lint and pressure, were perseveringly applied for three hours without any cessation of the hæmorrhage, which then flowed from the mouth, mixed with saliva. Upon removing the pledget of lint, which demonstrated the depth and form of the socket, I noticed a fast issue of very florid blood; she had previously lost a large quantity, but was not at all faint or even alarmed, believing it easily controllable, so that neither of these ordinary circumstances had any influence upon its duration. After passing a probe into the cavity, which appeared free from obstruction and very deep, I attempted with some force to introduce the point of my little finger; but, in consequence of there being a large tooth on the near side, this was ineffective. Some lint, well moistened with a strong solution of alum, was then tightly fitted into the socket, which, in half an hour, had proved of little benefit. Again removing the plug, and finding a profuse hæmorrhage, I introduced a stick of nitrate of silver fairly to the bottom of the socket, and held it a few seconds in this situation. Very acute pain was evinced immediately upon its introduction, which gradually became a throbbing sensation, but not the least evidence of blood was traceable upon its withdrawal, or was there the least recurrence, the orifice seeming closed with a blackish grey coagulum.

This lady has had the corresponding tooth on the opposite side, and several others, extracted without any unusual bleeding; and she has occasionally, before and since this event, inflicted accidental wounds without any troublesome result.

Case 3.—A fine, muscular gentleman, æt. 25, had a seton inserted over the superior lumbar vertebra, to perfect the cure of an injury he had received when hunting; he had always enjoyed perfect health, and, with this exception, had no ailment; residing six miles from Falkingham; and having almost discountenanced the name of an invalid, it was considered necessary to visit him only once in four or five days, and on such occasions the reports were satisfactory. After the seton had been employed about six weeks, great care being taken in dressing it by a domestic professing competency, Dr. Blomfield was urgently summoned with the intelligence, that he was bleeding to death from the seton. I immediately hastened to him, and was, indeed, shocked at the state of things; he was lying in the prone position upon a sofa, apparently dead, with extreme pallor and faintness; his dress had been put aside, the elastic tape withdrawn, and beaver, lint, rags, and a profusion of towels were being pressed upon his

back, all of which, with many others on the floor, had been saturated in turn with the profuse hæmorrhage. Upon cautiously removing this accumulation, so as to expose the wound, a small jet of blood streamed over my face, which was temporarily restrained by pressing my finger firmly over the orifice. At this conjuncture some wine was given him; and, upon very gradually elevating the side of my finger, I arrived at a small fungus, or large spongy granulation, about the side of a hempseed, which had formed, with others more healthy, near the under edge of the wound, and from this small excrescence the hæmorrhage issued profusely. Taking the scissors, and separating it, I placed a stick of nitrate of silver upon its foundation, and not the slightest disposition to any return of hæmorrhage followed. After remaining several hours assisting to reanimate my patient, I merely placed a piece of lint under adhesive plaster upon the wound. This gentleman, with all the advantages of a country life, pure air, horse exercise, nutritious and well-regulated diet, and a frequent change of residence upon the coast during two health-giving seasons, was many months before he at all rallied, from the immense loss of blood he had thus accidentally sustained.

From this interesting case I was led to infer that hæmorrhage, occurring after the extraction of teeth, which had, perhaps, long been a source of irritation in the socket, acting as foreign bodies in the vascular situation where their natural connection was destroyed, might occasionally produce such unhealthy growths into which a large vessel might enter, and thus become the cause of excessive hæmorrhage, or even death. Neither in these cases, nor those offered by Mr. Smethurst, is there the least evidence of any fibrinous deficiency in the blood; nor is there any corresponding particular, such as hæmorrhage after an incision, puncture, scratch, or leech-bite, that could substantiate the hypothesis of so peculiar a condition; or what is strikingly characterised in this diathesis, the great distress, throbbing, and irritability, occasioned by compression. In Dr. Burne's cases (LANCET, Dec. 12), the nitrate of silver seems to have been the only advantageous application; and in these, also, the blood seems to have been naturally fibrinous, as large *spontaneous* coagula collected upon the surface; their porous or spongy structure, and the pale and less viscid or watery appearance of the blood, is unquestionably a usual result, when their formation is subsequent to long-repeated hæmorrhage, especially where exhaustion is extreme. The cause in his cases seems to consist of either a deficiency of the natural fibrous tissue of the vessels, or an absence or depression of the nervous energy necessary to that structure: either or both of these circumstances will account for the accelerated pulse of early life, as well as for the difficulty in restraining hæmorrhage in infants after leeches, their application being almost invariably to relieve nervous depression, existing as a symptom of cerebral affection, or some internal congestion.

It would be interesting to ascertain the exact character of the pulse during health in persons of this unfortunate diathesis; its impetus, frequency, and fulness, should materially certify the existence of such a predisposition. I am, Sir, yours, &c.

CHARLES RAY.

Elizabeth-street, Eaton-square,
Feb. 20, 1841.

VACCINATION IN ST. MATTHEW'S, BETHNAL-GREEN.

To the Editor of THE LANCET.

SIR:—The legally-qualified medical men of this district have requested me to acquaint you with the following facts:—First, that at a general medical meeting, it was unanimously resolved to send the following unalterable declaration of our sentiments to the board of guardians:—

Gentlemen:—We, the undersigned, constituting the whole of the legally-qualified members of the medical profession, resident in the parish of St. Matthew, Bethnal-green, understanding that you intend to offer one shilling for each successful case of vaccination, respectfully beg leave to say that we consider two shillings to be the minimum remuneration we can receive. We, therefore, earnestly request of you to reconsider the matter, as we cannot, in honour, accept any less. (Signed)

J. Smith.	George West.
R. Griffiths.	—— Hayes.
Samuel Pearce.	A. S. Vandenbergh.
Edward Moore.	James Phillips.
Thomas Taylor.	C. Weston.
H. C. Langley.	—— Butler.
Hector Gavin, M. D.	William Taylor.

Secondly,—That the board, after the receipt of the above declaration, advertised for four vaccinators, at one shilling per head, without the gratification of having a candidate.

Thirdly,—That the guardians, being compelled to re-advertise, stumbled at last upon a Mr. Colson, M.R.C.S., of Wilson-street, Finsbury, who, ever anxious to uphold the honour and dignity of the profession, pounced with avidity on all four divisions. Begging of you to insert this in your forthcoming Number, I remain, Sir, your obedient servant,

THOMAS TAYLOR,
Honorary Secretary of the
Bethnal-green Medical Association.
January 13, 1841.

THE LANCET.

London, Saturday, March 6, 1841.

In another page will be found an account of an interview which "the Medical Conference" had with "Mr. Warburton, Mr. Hawes, and Mr. Wakley." It would appear that medical reformers, and their friends in the House of Commons, have agreed upon general principles; and that the opinion set forth by the Conference, and sanctioned by a great majority of the delegates, that "no *unlicensed person* should be allowed to *practise medicine* for remuneration or gain," is the only point upon which the difference is serious. Mr. Warburton admits the evils of unskilful practice, but he holds that no person should be prohibited from practising medicine; that the licence should not be indispensable; and that the public should not be prevented from employing the chemist, the druggist, or the quack, by a coercive clause, or by any but moral means—persuasion, education, and the gradual progress of enlightenment. Quackery, like superstition, he asserts, cannot be suppressed by prosecutions; the two diseases are the same, and so must be their remedies. These views have been adopted, on the principle of expediency we presume, by some members of the Irish Medical Association, and are upheld by two of the delegates, Dr. Macdonald and Dr. Maunsell, but not by Mr. Carmichael. A few officers of some of the corporations have espoused the same doctrines; but in asserting the necessity of the prohibitive clause, and the necessity of protection against unqualified practitioners, the Conference has indubitably expressed the opinion of the great majority of the medical profession.

Mr. Hawes, terrified, it would seem, by the menacing attitude of the druggists at the Crown and Anchor, has struck the prohibitive clauses out of his second Bill, which he laid on the table of the House of Commons a few minutes *before* the interview with the delegates of the Medical Conference.

The question is attended with great perplexities, but it is of so much importance that we shall proceed at once to its examination. The difficulty which meets us at the outset involves the precise definition of the words employed by the Conference, "practising medicine for gain." Medicine, of course, includes surgery; surgical operations would, therefore, be comprised in the terms. Medical advice, with respect to diet, regimen, or the employment of domestic medicine—whether drugs were administered or not—would also be included in the "practice of medicine;" but as the fee in consultation is at present honorary and voluntary, it would be difficult to prove the pecuniary nature of the transaction, unless the acceptance of the fee be considered conclusive thereof. Again, the druggists do not make a specific charge for their *advice;* they charge for the medicines, for a draught, a pill, or a mixture; and it would be only possible to prove that they "practised medicine for remuneration or gain," by assuming that this was implied where they sold a medicine prescribed in specific cases by themselves; for the compounding or dispensing of a blue pill, a black draught, or any other drug demanded by the patient himself, could scarcely be construed as "practising medicine for remuneration or gain."

Such are some of the practical difficulties which the Legislature would have to encounter, and which would not fail to be urged, with due vehemence, by the friends of free trade, and the advocates of unqualified practitioners in medicine. It appears to us, nevertheless, to be an incontestable fact, that no one should be permitted to prescribe active drugs, or allowed to tamper with the lives of the people, without submitting to examination by a competent tribunal. This principle is already recognised by the laws. The pilots of the Cinque Ports are examined, and the Duke of Wellington contends that it is for the public advantage. Upon the same grounds we contend that it is

for the *public advantage* that all who practise medicine, as a profession, should be examined. Ships may not sail up the Thames under the care of unqualified persons; and although property, as well as life, is concerned in that instance, few will avow that the precaution is taken for the protection of property, rather than for the security of life. The qualifications of pilots, and of engineers on railways, are much more readily ascertained by the parties concerned than are the qualifications of a medical practitioner; yet it has been established, satisfactorily, by experience, that it is for the public interest to insist upon public proofs of their qualifications.

An examination may not protect the public from all the effects of ignorance, carelessness, or quackery, but we do not see that its utility is thereby disproved. The tribunal would be fair, open, accessible to all; and every person who passed the test successfully would be licensed. Upon what ground, therefore, could any qualified person refuse to submit to a regulation in which the public health was so deeply interested? The ignorant and incompetent might refuse; they might protest, loudly, that the regulation was an interference with their *rights* to prescribe and to trifle with the health and lives of the poor; but a dispassionate Legislature would not listen to their protestations. They would be met, at once, by the inquiry,—Why do you not demand an examination and a licence, if you are qualified by the possession of a competent medical knowledge?

A prejudice has been raised against the wholesome principle of a test, by the existing irresponsible corporations, who, instead of instituting sound, practical, easily-accessible examinations, have busied themselves in a vexatious interference with education, which might have been safely left to the universities; and have demanded certificates instead of knowledge, because they happened to have a direct pecuniary interest in the sale of certificates at public hospitals and schools. This prejudice will be dissipated by a Representative National Faculty; and even if a protective provision shall fail for the present to find its way through the Legislature, no doubt can be entertained that it will, ere long, be more loudly called for by the public than by the medical profession.

Why is the sovereign stamped? Because the mould on its face proves its value and its genuineness. It has been tested. No one argues that the progress of education, of enlightenment, or of chemistry, can supersede the coinage. Still less can it be maintained that the medical licence will be superseded. The health and lives of the poor are sacrificed every day by ignorant prescribing druggists, quacks, and other impostors; medicine is a science of probability, and the poor cannot tell how fearfully the chances of death and disability are increased by the nefarious agents who know nothing of the nature of their diseases, or of the necessity of skill in the administration of remedies. We know—Parliament must know—and every reflecting person must be well aware, that thousands of helpless children are every year destroyed by the prescribing druggists of the metropolis; yet infanticide is murder. It may be all very well to say, "Wait; the diffusion of knowledge will set all these matters to rights." But will it bring these children back to life? Will it restore them to their bereft parents? Can the health of the poor victims be recalled? Is it not the imperative duty of a paternal government to interfere, and to prevent these irreparable evils without any unnecessary delay?

The doctrine of free trade and of non-interference is sound in its principle; but why do its friends expose it to the discredit of absurd and mischievous applications? Was it for the public advantage that the misguided labourers of Kent should be left at the mercy of THOM, or that the mad impostor should be left to drive a free trade around Canterbury, until the peasantry were enlightened, or shot dead? A young carpenter, in the canton of Berne, who happened to bear some resemblance to the ordinary

portraits of JESUS CHRIST, took it into his head that he was the Saviour of the world, and succeeded in founding a sect among the people; his tenets were of a very revolutionary cast, and decidedly opposed to the ties of marriage: he prayed, preached, and administered the sacrament in the woods; and the daughters of the peasantry and the small farmers, who, on the Jura side, are a fine, but not very intelligent race, fell into his fascinating, practical fanaticism with very fatal consequences, described in the following words by the *nouvelliste Vaudois*:—18 *d'entre elles à ce qu'on pretend ont eu des relations criminelles avec ce pretendu Sauveur, qui en laisse plusieurs dans une situation embarrassante.* The goverûment of Berne at length committed the pretended Saviour to prison, where he was confined as a lunatic. Now, what would Mr. WARBURTON say to freedom of trade carried to this extent? Would he wait, and not interfere till the peasantry of Berne grew more enlightened, or till education had taught their daughters that it was no honour to embrace Christian BENZ? The Legislature is bound to suppress superstition when it proves inimical to the public morals; and it is also within its legitimate province to suppress quackery when it undermines the public health.

The druggists, we understand, contend that they are the practitioners of the poor; the working-classes, they say, fall to their share; the poor can pay *them*, but cannot pay medical bills. It is admitted that, at the present low rates of wages, this is, in many instances, true. But we contend that, under a rational, humane Constitution, the *poor should be provided with medical advice and medicines by the State;* the parish doctor should be paid by the public, and should attend all the families of the indigent. The druggists are intelligent tradesmen; but they know nothing of the structure of the human body, of its various diseases, or of the operation of remedies; so that, with the best intentions, and the utmost caution, their practice must be fatal. We protest, in the strongest terms, against the doctrine that the working-classes of this country should be left in sickness in the hands of unqualified practitioners and quacks. They deserve better things of the Legislature.

The laws of England have, from the first, adopted the principle (although it was inefficiently carried out) that medical practitioners should be licensed, and that the unqualified practitioner should be in every way discouraged and suppressed.

We submit these statements to the consideration of Mr. WARBURTON, and of those who think with him. We entreat these gentlemen to reconsider the subject. If they could be induced to weigh the arguments which have been adduced to prove the necessity of prohibiting quackery and unskilful practice by individuals, and by the medical associations, we feel persuaded that they would see the necessity of protecting the medical profession and the public. But Mr. WARBURTON held out no hopes to the Conference, and we fear that for the present session his mind is without "the shadow of turning." He will vote against and speak against any Bill containing a prohibitive clause. Mr. HAWES has gone round to his opinion. It remains for medical reformers to decide upon what course they will pursue. They must express their wishes in petitions. The Conference seemed to be impressed with the necessity of union among reformers; and it was intimated that to secure the important support of Mr. WARBURTON, who has liberally abandoned his own Bill, some concession should be made. The introduction of a prohibitive clause may be moved, and the sense of the House be taken upon that principle separately; and there can be no doubt that if the law remain as it is, after the National Faculty has been founded, the public will, in the course of two or three years, insist that the qualifications of all persons practising medicine shall be tested by public examinations.

OUTLINE OF A PLAN

FOR REORGANISING

THE MEDICAL PROFESSION.

Given in by DR. FORBES *at the Conference held at Exeter Hall in February*, 1841.

ALL real and permanent improvement in the medical profession must be based on an improved system of education, preliminary and professional. It seems essential to the establishment of such a system, that there should exist a body exclusively devoted to the regulation and superintendence of education, independent of, and only partially connected with, the medical institutions. It is, therefore, necessary to include the consideration of the educational body in every scheme of medical reform.

I.—THE EDUCATIONAL BODY.

1. A body to be instituted in each of the three kingdoms (on the plan of an UNIVERSITY, and to be so named if thought desirable*) to regulate scientific and professional education generally (excluding theology), and to grant degrees in law, medicine, and arts. (*This body not to teach.*)

2. To consist of two parts.
   - *a.* A senate or deliberative body.
   - *b.* A council or executive body.

3. The SENATE to be a numerous body—(say 60, 80, 100,) to be elected (*eventually* by its own graduates only? but) at present by the Crown from persons proposed by such authorities as might be agreed on; say, *e. g.* the existing [Universities?] scientific bodies, the medical and legal professions; thus—
   - *a.* A part by the council of the National Faculty of Medicine (*if instituted*).
   - *b.* A part by the scientific bodies; *e. g.* the R. S., &c.
   - *c.* A part by the Colleges of Physicians and Surgeons.
   - *d.* A part by the Government.

The members of the senate to be elected for a period of years; say 10, 15, 20; or for life, if thought more desirable.

4. Among the duties of the senate would be—
   - *a.* To elect (from their own body) an executive council, to carry out the details; to consist of a smaller number, say 15 or 20.
   - *b.* To regulate the education of the candidates for its degrees.
   - *c.* To grant degrees.

5. The COUNCIL to consist of due proportions of members of the different faculties of medicine, law, general science, &c.; so that, in the performance of its duties, it might resolve itself into sections or committees, for the consideration of the different subjects of law, medicine, &c., but all subordinate and subject to the control of the whole council. Part of the council (say one-fourth) should retire into the body of the senate annually, and not be re-eligible the same year; the retiring members to be, as near as possible, in the same proportion from each section of the council.

6. Among the duties of the council would be—
   - *a.* To appoint *examiners* (who might or might not be members of the senate, but *not* members of the council). The medical members of the council would naturally nominate the medical examiners, subject to the decision of the council at large. The examiners to be elected for a limited time, say 1, 2, 3 years, and not re-eligible the same year.
   - *b.* To fix and superintend the examinations, &c. &c.
   - *c.* Generally to carry the decrees of the senate into effect.

7. The members of the senate not to be paid.

The members of the council to be paid?

The examiners to be paid.

8. *This educational body or university to have the exclusive right of granting that* DEGREE *or* TESTIMONIAL, *after examination, which shall entitle its holder to claim, from the council of the National Faculty of Medicine, the licence to practise medicine.*—[If thought desirable, the testimonial might be granted to graduates of certain other institutions after a modified examination, or even without any.]

II.—THE MEDICAL BODY AS A PROFESSION.

1. A National Faculty of Medicine to be formed in each of the three kingdoms: to consist (at present) of all legally-qualified practitioners duly enrolled or registered as members, and (hereafter) of all licentiates of the council of the faculty duly registered.

2. All the members of this faculty to have equal legal privileges to practise all branches of the profession, and to vote—[after being licensed three or five years?]—in the election of councillors, &c.; and no other persons to be authorised to practise any of the branches of medicine.

3. The members of the Faculty of Medicine to elect (in conjunction with other bodies to be hereafter specified) a governing council, for the regulation of their affairs as a professional body. Among the duties of this council would be—
   - *a.* To register and license the graduates of medicine, bearing testimonials from the educational body.

* For England, the present University of London might be easily remodelled into the proposed institution.

b. To regulate the annual registration of members of the faculty.

c. To be a court for the consideration of matters relating to the profession as a body, and to make by-laws (under certain restrictions) for regulating its affairs.

d. To publish a national pharmacopœia, in conjunction with the Colleges of Physicians and Surgeons and the College of Pharmacy.

4. The council to consist of, say 30 members: part (say 21) to be elected by the Medical Faculty; part (say 9) by the Colleges of Physicians and Surgeons and by the Government conjointly or severally, say 3 by each College and 3 by Government; or the Colleges to elect the whole nine, the Government having a veto. A new council to be elected every three years.

III.—THE MEDICAL BODY AS A DEPARTMENT OF SCIENCE.

It being understood that the present Colleges of Physicians and Surgeons intend to adopt the representative system of government, at least to a considerable extent, it is supposed that the following arrangements might correspond with their views, and conduce, at once, to the interests and honour of themselves and the whole medical profession.

1. The profession being legally organised and governed in the manner aforesaid, the colleges would naturally come to devote their principal attention to the cultivation and promotion of science in their respective departments. They might, however, have secured to them, if thought desirable, the power of granting titles of a higher order conferring certain privileges.

2. The future constitution of the colleges might be as follows (understood to be the proposition of the colleges themselves):—

a. *At present* all their own members or licentiates of ten years' standing,—*hereafter*, all licentiates of the medical faculty of five years' standing,—to have a claim to be admitted, by ballot, into the fellowship, without examination (the candidates for that of the College of Physicians having previously the degree of M. D.), on being proposed by a certain small number (say 6—10) of fellows, and on paying a certain fee. And licentiates of the Faculty of Medicine might, further, be admitted as *associates* of either college (i. e. members of the college without the power of voting, &c.) immediately on receiving the licence, on paying a certain (smaller) fee; with the option of remaining in this class even after the period when they became eligible to the fellowship.—[N. B. No objection to these fees being somewhat high, the preferring a claim to the honorary titles and annexed privileges being purely voluntary.]

3. The privileges and powers conferred on the colleges might be something of the following kind:—

They might have the exclusive privilege of granting, respectively, a higher testimonial or title in medicine and surgery to any of their own fellows (and none else), on their undergoing an examination by examiners appointed by the colleges, and on paying a certain fee. From the bearers of this higher title might be chosen (and from them only),

α. Physicians and surgeons of hospitals, &c.

β. Teachers of medicine in medical schools.

γ. Examiners? &c. &c.

[N. B.—It is believed that, as a large proportion of the members of the profession would be ambitious of the honour of being associates, and more especially FELLOWS of the colleges, and a considerable number would take the higher title, the funds thence accruing to the colleges would be very great—much greater than at present—and would form a noble treasury for promoting science and rewarding scientific merit.]

4. The Society of Apothecaries might most appropriately resolve itself into a College of Pharmacy, for the superintendence of everything relating to drugs and pharmaceutical preparations. In this capacity it would naturally be entrusted with the examination and licensing of the whole body of chemists and druggists, and would be productive of incalculable benefit to the profession and the public.

THE MEDICAL PROFESSION AND THE POOR-LAW COMMISSIONERS.

In the pamphlet that has issued from the Provincial Association through you, it is distinctly charged against you, that you discountenanced any allowance being made to medical officers for vaccination in unions: to this charge a lame explanatory note is appended by order of your commission. I call it lame, because men, like those attached to your commission, so well acquainted with the laws of sickness, must needs be aware, and through them yourselves also, that the protection of vaccination is a less cost than the relief during the sickness, and the burial in case of death; this especially, when the disease makes such sad inroads as

it has done among the poor of this country. I make no other charge at present respecting this matter, but end it by observing that, arguing from the history of your previous administration, the benevolent intentions of the Act are by no means likely to be carried into full effect. I am, however, aware, that in the character of a stepping-stone to the office of a board of health, it has a chance of being administered vigorously; and this, if I may say it, not from any affection toward our profession, nor from any love of the people, but that the supreme vaccine board may be of sufficient repute, as that it may, without actual commotion, be made the board of health. Bentham has it that, in the point of a man's interest, that line of conduct which will afford him the highest pleasure, is the line of rectitude: this maxim of the sage is not more closely copied by any than yourselves. Doubtless, like texts of Scripture in old-fashioned churches, it must be written up in the offices of Somerset House to be a light in your path: have a care that it prove not an *ignis fatuus*, luring you through many difficulties to your sure destruction. I hinted in my last letter that you had of late made certain inquiries of all upon whom you had or could institute any claim, the character and tendency of these documents I will endeavour to show clearly this within my plan, for these letters are as much for the medical profession as for yourselves. In your official circular, issued September last year, you had an article, "Extension to Scotland of the Inquiry as to the Sanatory Condition of the Labouring Classes:" the questions here exhibited being the same as those previously issued by you to the unions of England; the following you will recognise as some of them:—

4. What is the *external* condition, in the following respects, of the residences of the population amidst which such diseases occur?—

5. Describe the *internal structure and economy* of the residences of the population amidst which contagious febrile diseases arise,—

6. As to the internal economy of such residences, describe further,—

8. What is the common cost of erection, and average cost of repairing, each description of the tenements or cottages inhabited by the labouring classes?

9. What are the rents paid by the labourers for each description of tenements or cottages?

10. What is the general proportion of the rent paid by the labourer to his total expenditure?

11. What is the common cost of the lodgings to persons of the labouring classes?

12. Are you of opinion that any, and what, legislative measures are desirable or available for remedy of any of the evils existing within your district?

These particular inquiries may be said to be somewhat connected with the duties of a poor-law commission; and they are so, but certainly very remotely, not by any means so nearly as the question of authorising vaccination before you became the supreme board; and this you denied. Clearly then you forbid and discourage that which at the time appears to serve no deeper purpose, than the preservation of the people from a loathsome disease, and by consequence a burden upon the ratepayers, while you have no difficulty in assuming other duties which are comparatively foreign. If you expect the labouring population to become ultimately pauperised, then it is right to regret that you should cast about to know their whereabouts, their circumstances, and their habits; but as this is not very likely to be the case with those who form the bulk as they form the pillars of our state, so must there be some other reasons why such searching inquiries are being made: inquiries, I with emphasis say it, proper and needful to be issued, but not by you. I repeat it, not by you, who exhibit the anomaly of a despotism in particulars within what is called a limited general government: a despotism, the spirit of which has been too often seen to be doubted, and which extending as it is into other matters, will, by and bye, show us that world wonder, *absolute command*, in detail, *limited monarchy* in general. The thing, tyranny—the profession, liberalism—the strong power of centralisation, with the promises of benefit and protection. But the medical profession is aware of this, and spread as it is through all the land, may make others aware of it also. These inquiries can have but one object; they are not so much within the scope of your real office as other things that you have rejected; they concern the manner of life, the circumstances, the residences of the bulk of the community; in short, they are questions which alone concern a board of health. Of the same kind, I presume, are the researches now being made by gentlemen employed by your commission; all the information acquired in these various ways, to be passed through your hands that you may have the credit, and doubtless the profit also, that when the time comes for the reports to be presented to Parliament, it may be seen that the poor-law commission have done this, to the end that the bulk of the community, the artisan class, together with the medical profession, may be delivered over into your hands, that you may buy land and build for them; that you may prescribe how they shall eat, drink, and live together; that you may form the people into joint-stock companies, and force the medical man to attend for a pittance; that you may form splendid *sanatoria*, that the middle class, that the

sick, not "him that hath no helper," may be admitted, and attended by those whose talents shall have the stamp and the badge of your poor-law commission and board of health: then will be the time when the poor shall have to their dwellings, as now in their unions, external decoration, and a proper ordering of small windows; and within, bare walls, piercing draughts, and dismal pottage. Then shall the attendance in life and death be given by men, such as the low priests and conjurors of former times, because the niggard train of your schools shall have long since swept away the honourable incitement that brings liberal and great minds into our profession, and shall have substituted for them those only who are able to bear the snubbings and the degradations of central commissions. Then also will be seen the palaces where the monied sick will be attended—where architecture shall be instead of comfort—where groans will be in common, and where the voice and hand of the hireling shall be, instead of the affections which make pain light and even death easy. There is nothing of the ideal in all this; for your union-houses, your clubs, and your already-proposed sanatoria, which the sick citizen of London said he would himself enter if sick, are before the public; let them, and let the medical profession consider well what these things mean. Independently of these letters of inquiry, the nature of which is now manifest, there are other documents bearing also upon the same point, and hinting of the desired office. I refer now to papers headed Sanatory Measures, by you issued to your medical officers; in this manifesto you show a facility in taking up any Act of Parliament whatever, so that it only promises to administer to future advancement. This method of issuing other enactments beside your own is a clever way of gradually insinuating yourselves into the duties contemplated in such Acts, so as, at the same time, to cause no alarm, to excite no fear in the minds of those who might, if they suspected, oppose you. In this document you advise that the Act in question authorises "to proceed to any house, or to any part of any house whatsoever, which is in such unwholesome condition that the health of the inmates or of the public is thereby endangered." Really it is quite affecting to see men having the reputation of hard-heartedness, suddenly feeling so much for the public health, that they must needs look about into the various Acts of Parliament, if haply they may find something that may administer to their wishes. Seriously, Gentlemen, it is strange that you should do so much in connection with sanatory measures, unless you have some ulterior object; an object which at length, no one doubts, and which, indeed, you do not conceal. I, for one, believe that some new regulations must be made connected with the public health; but as I shall soon show it is not the poor-law commission that can administer it, you are well aware, Gentlemen, that to fulfil properly a duty of this sort, you should possess the confidence of the people, whose welfare you profess to look to; but the artisans and working-class of this country actually fear you; and fearing suspect you, how could you work upon free minds—minds, also, be it observed, daily growing in intelligence,—when they are filled with distrust? You would advise houses to be built here, to be built so, to be so conducted; you would advise—I beg pardon, you are more fond of insisting than advising,—you would insist that the good woman should clean her house now, and her children then, and should make her beds (if she have any) after duly ventilating them and the beds. But what would a commission, strongly distrusted, gain by it—*resistance:* you would establish a feeling that at length the English artisan's fireside is not free from control? But let the board of health be composed of such men as Howard, such as Pritchard, let them be known as the friends of the people, and their advice shall be followed, the board of health shall be efficient. Again, to carry out a measure like this efficiently and fully, would you not require the confidence of the medical profession, men accustomed in their daily visits to refer the disease they see, to the filth, to the neglect, to the soil, to the mode of living, or building, or to any of the multitude of causes of such disease; these are the men who visit such localities, and often none but them who are able to estimate the true state of such matter? Could you administer to the duties of a board for an hour without their co-operation and support? And could you, after all you have done, expect such a state of things? tenders, jealousies excited, improper and unskilful persons introduced into unions, medical clubs, niggardly remuneration-promises merely, sanatoria, &c. &c., all forbid that this should ever take place. True, you might insist that the officers of unions should perform the duty, should spy out the filth, and inform the then authorities; I mean yourselves. But their hearts are estranged from you, and in these things you know the difference between the cold service of a duty performed as such, and that which the profession would exhibit in the service of a properly-constituted board of health. How, then, could you take an office which could not be administered, and which even the attempt to do, would produce commotion, strifes, hatred, jealousies in its commencement and course, and in its termination, failure; a failure which would preclude the possibility of afterwards administering a better measure? But, Gentlemen, you have not fulfilled the duties for which you were especially appointed: why, every now and

then branch off to the right, to the left, seeking new duties which you yourselves must be aware you are not qualified to perform. There is a singular fatality in your measures, which, nevertheless, deters you not from administering duties important to the life and health of your fellow-creatures; you take the poor-law, and both the poor and the rich are dissatisfied with your proceedings; you try your hand at small-pox prevention; you issue your orders, and immediately the registrar-general's weekly reports tells of an alarming increase; you issue your sanatory regulations, and directly death seems to reign among the poor creatures submitted to your experiments. True, you might employ others to do it; but what would then be the use of your superintendence? A business never succeeds well when the superintendent knows nothing of it,—when he leaves from necessity its arduous and responsible duties to be performed by hirelings:—independently of this, an ignorant superintendence is subject to two certain results; if it be active, it becomes mischievous; if inactive, useless. But enough, it now becomes manifest, to use the fine language of our religious ritual, that you have left undone the things you ought to have done: witness your unfinished poor-law duties—that you have done the things you ought not to have done, which the public and the profession well know; and that, finally, as far as your fitness for a board of health is concerned, that there is no health in you. I am, Gentlemen, your obedient servant,

PHILANTHROPUS.

London, Feb. 1, 1841.

VACCINATION IN DUDLEY.

To the Editor of THE LANCET.

SIR:—The board of guardians of Dudley, at one of their recent meetings, proceeded to appoint medical officers, under the provisions of the new Vaccination Act, for the various districts of their union. For the Sedgley district four practitioners were proposed, and among them a man who has no diploma from any college, or licence from the Hall; in other words, a quack. This man was elected as one of the three; whereas the fourth, and rejected candidate, has been practising at Sedgley upwards of thirty years. This has been exposed in the *Staffordshire Examiner*, of which I send you a copy, but no notice whatever has been taken of it by the board. Many in the profession will feel obliged if you will inform them how this should be rectified. I remain, Sir, your obedient servant,

ONE OF THE PROFESSION.

Dudley, Jan. 26, 1841.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Monday, March 1, 1841.

THIS being the anniversary of the society, the members were occupied with the election of office-bearers.

ANNIVERSARY MEETING.

Sir B. BRODIE gave the annual address on his retirement from the chair of the society. He said, that another year had passed away since he had addressed the members before, and he had great pleasure in announcing that the society had continued to increase in prosperity and reputation; the meetings during the past year had been numerously attended, many valuable papers had been read, some of which gave rise to interesting and important discussions. Thirty-two new members had been admitted, and the library had added 270 volumes to its stock; the finances were in a prosperous condition, the receipts very much exceeding the expenditure. On the last anniversary he had stated that the hand of death had passed lightly over their body, only one member during the previous year having ceased to exist; so, during the past year, the deaths had been few in number, only three members having died within that period. This small amount of mortality in so numerous a society would be explained by the fact, that the majority of the new members belonged to the junior classes of the profession. Yet, though the deaths in number had, during the past year, been unusually small, otherwise the loss that had been sustained from this cause was great. One of those who had departed was one belonging to the society at its foundation, had been its president, and had contributed many valuable papers to the earlier volumes of its "Transactions." There were none present who would not know that he alluded to Sir Astley Cooper, whose loss would not only be felt among his own immediate circle of friends, but throughout society in general. Sir Astley had long occupied a distinguished station, and while he (Sir B. Brodie) was yet a student, had attained to great notice and distinction, and he advanced in reputation to the last; for although very much employed for years in general practice, he constantly worked for the good of the profession, and added fresh claims to its respect and gratitude. Sir A. Cooper was the fourth son of Dr. Cooper, a clergyman of independent fortune at Yarmouth, who acted as private tutor to his sons; Sir Astley did not early exhibit any traits of industry or talent, but was rather distinguished as a spirited and enterprising lad. An accident which occurred at the time he was sixteen years of age determined his future pursuit. A boy fell from a waggon and wounded his

femoral artery; all the boys present ran away, frightened by the profuse bleeding, with the exception of young Cooper, who had presence of mind enough to tie his pocket-handkerchief firmly around the limb, and thus commanded the hæmorrhage till a surgeon arrived. The applause he obtained for this act determined him on becoming a surgeon, and his father sent him to London as a private pupil of the late Mr. Cline; it was at that period the absurd custom to place boys to study surgery at fifteen years of age, as though a previous general good education was not necessary; the consequence was, that the early studies of Astley Cooper were interrupted, and were attended with no good result. It would appear, however, that Mr. Cline saw something uncommon in his idle pupil, and thought that he would turn out well; for he told him at this period that he should teach anatomy in Guy's Hospital School, if he would qualify himself for that duty. From this moment his careless and indolent habits were changed to those of unceasing industry and perseverance. In 1796, when twenty-eight years of age, he first began to deliver a course of lectures on surgery, he having previously attended the lectures of Mr. Hunter. His first attempts at lecturing failed, owing to his endeavour to accomplish too much, and his class dropped off. He then commenced a new system, he took notes of cases in the hospital, and collected facts. His discourses were then full of important practical knowledge, and he became an influential and popular lecturer. In 1800, his uncle, Mr. Cooper, surgeon to Guy's Hospital, died, and Sir Astley was elected to the vacant office; and he was now placed in a position to rise to eminence. His career as a hospital surgeon was so generally well known, that Sir Benjamin would not dwell upon it, neither would he take up the time of the members by enumerating his contributions to surgical literature, all of which were so familiar to the profession. If it be generally interesting to study the character of those who by the exercise of their own talents have raised themselves to a conspicuous station in society, it is so more especially on an occasion like the present, when the individual is one with whom we have ourselves associated, whose early hopes and aspirations were similar to our own, who has been engaged in the same pursuits, and partaken of the same anxieties and gratifications with ourselves. In reviewing the history of Sir A. Cooper, the first thing that attracts our notice, is the perfect devotion with which he followed the science of his profession from the very beginning to the very end of his career. No other pursuit stood in competition with it, and we cannot doubt that his attachment to it was genuine; that he loved it for its own sake, without reference to it as an instrument for amassing a fortune, or acquiring distinction and importance in the world. Some years ago, when his health was suffering from severe mental and bodily exertions, continued during a long series of years, he retired, to lead the life of a country gentleman, on his own estate in Hertfordshire; but the experiment failed; and in less than a year, by the want of interest in other objects, he returned, to resume his old employments. No alteration took place in this respect as he advanced in years; and the additions which he made to his anatomical museum, and his work on the structure of the female breast, bear honourable testimony to the zeal and activity of the latest period of his life. Zeal may exist without industry, as there may be industry where there is little zeal; but in Sir Astley Cooper these two qualities existed in combination, each tending to exalt the other. Even up to the time of his last illness, he was in the habit of rising at half-past six o'clock in the morning, and was generally engaged in some anatomical and pathological dissections for two or three hours, before he began what other persons would have regarded as the first business of the day. He was never without occupation, and having no desultory habits, he persevered steadily in any investigation that he had begun, until he had completed it as far as it was in his power to do so. A strong physical frame afforded him peculiar facilities of labour; yet, notwithstanding this, his exertions were at one period beyond his powers, and he informed me, not long since, that during a great part of the time when he was engaged in extensive practice he was subject to attacks of vertigo. One of these, more severe than usual, occurred in the year 1824, attended with a slow and intermitting pulse. On one occasion his limbs gave way under him, and he fell to the ground. In the year 1827 he had a fever of an intermitting kind, attended with great general debility and loss of power over the muscles of one arm, so that he could with difficulty raise anything to his mouth. This alarmed him greatly, and seems to have been the immediate cause of his temporary retirement from his profession. He afterwards had a fit of the gout, which, combined with the repose of a country life, relieved his other symptoms. It must be acknowledged that we find in Sir Astley Cooper but little indication of that inventive and discursive faculty which analyses, combines, and abstracts, and which perceives and realises remote relations and analogies, and to which we must attribute the great exploits of genius, whether it be in poetry or science. It must also be acknowledged that, for the most part, he thought too rapidly for strict philosophical induction; that he was apt to draw a general conclusion, even from a single instance, which nothing but an abundant

evidence could justify. In truth, the constitution of his mind was such that it was less fitted to deal with principles than it was to deal with facts; but in this last respect I have scarcely known his equal. He was a minute and accurate observer; and his perception of facts was so vivid, and the attention which he bestowed on them was so great, that almost everything of any importance which he had ever witnessed remained indelibly impressed on his memory. Many who are now present can testify to the truth of this observation; and all will remember with what facility, when a remarkable case was presented to him, he could draw from the fund of his vast experience, describing some cases exactly like it which he had seen some years before, and others resembling it in some respects and differing from it in others. He was scrupulously exact in his statements; and no one could be more free than he was from that weakness, to which even some honest persons are liable, who make themselves believe that facts are different from what they are, when it so happens that they do not precisely suit their preconceived opinions. At one period of his life, Sir Astley Cooper was much engaged in operative surgery, and an opinion had prevailed with many out of the medical profession, that skill in performing operations was the greatest talent which he possessed. Some of the absurd, vulgar, and, for the most part, unfounded anecdotes which have been published since his death are calculated to give countenance to this opinion. But I need not tell the fellows of this society how great an injustice this is to the memory of our late associate. I have no doubt that as a young man Sir Astley Cooper might have been gratified by the credit which he obtained as an operating surgeon, at a time when he had not yet had the opportunity of acquiring a higher and more substantial reputation. Many, however, have been his equals, and even his superiors, in this respect; and the estimation in which he was held among those who had a right to judge of his attainments, is to be attributed to his intimate knowledge of the history and progress of disease, and to his talent in selecting and applying the appropriate remedies, and to nothing else. The time may even arrive, when it will be forgotten whether he was, or was not, expert in the performance of operations; but his published works will remain as long as surgery is cultivated, and especially the treatises on hernia and dislocations, replete with important facts, and containing the clearest rules of diagnosis, will transmit his name to posterity with those of Sydenham and Hunter, as a great benefactor of the human race. Sir Astley Cooper enjoyed an unusual degree of popularity for a long series of years, especially among the members of his own profession, and more than his character as a surgeon, however high it stood, can easily explain. He owed much of this to his moral qualities. He was considerate towards other practitioners, always ready to communicate whatever information he possessed, in a simple and familiar manner; and he never attempted to obtain credit for himself at the expense of a fellow-labourer. In his intercourse with others he was essentially kind-hearted, and possessed that degree of cheerfulness which made him acceptable to every one whom he met, and without which it is so difficult, and I may say, impossible, to obtain an influence over the minds of other men. He possessed another great advantage, in having no small degree of practical knowledge of human nature; by this, I mean not that kind of knowledge to which this appellation is so frequently misapplied, founded on a quick perception of the weak points of the minds of other men, by means of which individuals of small capacity are enabled to gain an ascendancy over those whose intellects are superior to their own, but a clear and ready insight into the whole of the human character, and a knowledge of the qualities of the mind generally, of the motives by which the actions of mankind are regulated. There is one other point in Sir Astley Cooper's character which it occurs to me to notice before I quit the subject, and I do so merely, because it gives me the opportunity to contradict some most false and injurious statements which have been lately put forth respecting him. Although he derived from his practice a larger income than was ever obtained either in the medical profession or in any other, he never exhibited in his profession anything approaching to the vice of avarice. He was in the greatest degree liberal, and apparently careless as to the remuneration which he received. I say this with the utmost confidence, having never known nor heard of a single instance to the contrary, during my long acquaintance with him.—The other members which the society had lost during the year, were Mr. Vye, of Ilfracombe, and Mr. Howship. Mr. Vye was not much known to the society; but Mr. Howship had been a contributor of some papers to the "Transactions," which, whatever might be their merit, certainly displayed considerable industry. He was an excellent draughtsman, and this first, perhaps, led him to the study of morbid anatomy: he had lately published a work in which he had recorded his observations.—The worthy president concluded by thanking the members for their kindness to him, and by expressing a hope for the future prosperity and reputation of the society.

Dr. H. Lee returned thanks on retiring from the secretaryship, and spoke in high terms of the attention of the sub-librarian, Mr. Williams, to the comfort of the fellows.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 20, 1841.

Mr. Gregory Smith, President.

POINTS IN PRACTICE.

Dr. Marshall Hall read a paper, embracing a few practical applications of the excito-motory doctrine, as they served to introduce the general subject to notice and discussion. He commenced with some observations on

THE NATURE AND TREATMENT OF CHOKING.

Choking is only another form of the croup-like convulsion, arising from a more sudden but less permanent *cause*, upon *other* incident excitor *nerves*; and it is to be treated upon precisely similar principles: *the cause must be effectually removed, and as speedily as possible.*

I was witness to a case of choking the other day; respiration was arrested; there was a fearful struggle for breath; not a moment was to be lost; I took the boy and placed him between my knees, so that I could make free pressure on the abdomen, whilst I placed one open hand on the posterior part of the thorax, and struck with the flat part of the other, gently closed, on the anterior, briskly, forcibly; the latter part of this operation was promptly performed, and the little patient was instantly relieved.

The other day the mother of a most intelligent lady, whose husband is liable to epilepsy, was suddenly choked; the phenomena were precisely those which precede or commence the epileptic attack. This remark was made by the lady in question, who was but too well acquainted with the terrible appearances in that morbid affection.

I must here adduce a case from the "Dublin Hospital Reports," vol. ii., p. 224, described by Mr. Kirby:—"One evening in November, 1815, I was called to visit a poor woman who was brought to St. Peter's and St. Bridget's Hospital by some humane persons, who found her in the street in an almost lifeless condition. She was one of those miserable creatures who feed in our streets upon the mixed offal which they receive from servants. She was greedily enjoying this wretched fare, when a morsel stuck in the œsophagus. When I arrived at the hospital she was dead to all appearance, yet I opened the trachea above the sternum, and patiently inflated the lungs for a considerable length of time, but to no purpose. At the sides of the neck there prevailed a remarkable fulness, which I could not explain until the parts were afterwards examined.

On the day following a coroner's inquest was convened, and the necessary dissection was performed by Mr. Michael Daniel. Three large morsels of food were found in the œsophagus: the superior, which seemed the largest, lay immediately behind the cricoid cartilage; the inferior occupied the œsophagus nearly as low down as the upper extremity of the sternum: this morsel contained a piece of bone an inch and a half long, one of its ends being very sharp and pointed.

The bone lay obliquely across, transfixing the œsophagus at its left posterior part, and wounding the right subclavian artery, which, contrary to its usual course and origin, lay in this situation as it passed from the left of the arch of the aorta, where it arose, towards the right shoulder; the surrounding cellular membrane was filled with blood, which, accumulating principally at the sides of the neck, had produced the fulness of the surface, a circumstance, until now, inexplicable; the œsophagus and trachea were both free from blood; the latter was pervious, and did not seem diminished by the pressure of the morsels; the epiglottis almost completely concealed the cavity of the glottis, which was so diminished by the forward inclination of the arytænoid cartilages, as to be scarcely discernible; the rima glottidis was altogether closed.

This case adds to the list of those which attract us rather by their singularity than by the usefulness of any hints they furnish to the practical surgeon. It seems, however, to confirm the opinion, that it is not to the mechanical obstructions of the trachea we are to look for the immediate cause of death, when a solid substance is arrested in its descent through the upper part of the œsophagus, so much as to the spasmodic constriction of the muscles of the glottis, which are suddenly and powerfully excited by the presence of the obstructing body.

Neither the wound of the artery, nor the consequent effusion of blood, appear to have contributed to the suffocation.

I do not agree with Mr. Kirby in his statement, that this case does not suggest any hints to the practical surgeon. On the other hand, it is plain that not the probang, which may not be to be obtained in due time, nor any attempt to reach the object by the finger, can be successful in this urgent case; the excitors of vomiting must be called into action, so that the cardia may open, and either vomiting or the sort of artificial vomiting which I have described as resulting from a firm blow on the thorax be induced.

If this plan fail the *probang* should be used, and, if necessary, *tracheotomy* should be performed.

THE MODE OF PASSING THE STOMACH-TUBE.

It is often required to pass the stomach-tube in cases of poisoning. Now, in doing this, the great object is to avoid the *excitors of vomiting*. This is done by passing the tube boldly through the isthmus faucium,—avoiding touching the base of the tongue,

the posterior gums, or the veil of the palate, to the posterior part of the pharynx. In this last part, there are no nerves but those of the excitors and motors of deglutition; so that there is no difficulty in passing the stomach-tube, with these precautions, freely on into the œsophagus, and finally into the stomach itself.

THE USE OF THE PHARYNGEAL TUBE.

It has been usual, with the object of administering food, in cases of cut-throat, of mania, &c., also to introduce the tube through the whole course of the œsophagus into the stomach itself. It occurred to me, as a natural deduction from the physiology of deglutition, now ascertained to be a reflex *spinal* act, in the pharynx especially, that it was unnecessary to adopt this measure; and that to introduce a tube, which may be called the *pharyngeal tube*, within the influence of the excitor nerves of deglutition, and within the grasp of the constrictors of the pharynx, would be sufficient. The interesting experiment was performed by Mr. Arthur Stilwell, of Moorcroft house, upon an insane patient, who had refused food, and had been fed by means of the stomach-tube, and whose case indeed suggested it. It succeeded, as I anticipated.

In the case of poisoning, the *stomach-tube* itself must be used. In regard to this case, however, I beg to make one observation: frequently, patients make ineffectual efforts to vomit, under the conjoint influence of an emetic and of a narcotic poison; if, in such a case, the stomach-tube be introduced, vomiting is frequently perfectly accomplished through the tube itself, and along its sides, from the influence of the tube on the excitors of vomiting, and through them on the cardia; and the further operation of the syringe may be unnecessary. I need not state that cases of severe poisoning will, however, require the syringe, both for the injection into and the extraction of fluids from the stomach.

Whether we use the *pharyngeal* or the *stomach-tube*, it is important that we should study the distribution of the excitor nerves. The branches of the trifacial nerve, distributed to (or rather originating from) the soft palate, the posterior part of the gums, and (I believe) to the tongue, are the excitors of vomiting, and must be avoided. The branches of the glosso-pharyngeal or of the pneumogastric, originating from the pharynx, are the excitors of deglutition, and must be called into action. We must then pass the tube carefully through the isthmus faucium, and boldly carry it to the posterior part of the pharynx. In this manner every difficulty is avoided, and the operation is the simplest possible.

But it is generally necessary in the insane to open the mouth, and to retain it open by force. To avoid this necessity, I propose to introduce a smaller tube along *the floor of the nostril*; in doing this, we pass it *below* the nasal branches of the trifacial, which are the excitors of sneezing, and *above* the palatine branches of this nerve, which, as I have stated, are the excitors of vomiting.

This suggestion was also adopted by Mr. Arthur Stilwell. A long, narrow, flexible tube, of the diameter of a large male catheter, was employed. It was passed just seven inches through the nostril, being incurvated towards the pharynx. The patient entirely unaffected by the procedure. The fluid food was then propelled along the tube. Deglutition took place regularly, marked by the usual movements of the larynx: in vain did the patient try to expel it; saliva only appeared at the lips; the food had passed beyond the domain of *volition*, it had been seized by the actions of the excito-motory power. It passed freely onwards into the stomach!

ON IRRITATION OF THE FAUCES, TO INDUCE VOMITING.

From an ignorance of the physiology of these parts, a singular event has occurred. A patient, wishing to excite vomiting, has introduced a feather, too far, *beyond* the excitors of vomiting, which he ought to have stimulated to their proper action, *to* the excitors of deglutition, under the influence of which the feather has actually been swallowed.

Two cases of this kind are recorded in the "Medical Observations and Inquiries," vol. iii., p. 7, and vol. vi., p. 231.

A patient, wishing to avoid the taste of medicine, has, in like manner, passed a teaspoon within the grasp of the constriction of the pharynx, and it has, like the feather, been swallowed.

INTRACTION OF THE RECTUM BOUGIE.

There are by no means solitary cases of this kind. The other extremity of the alimentary tube presents us with a phenomenon of a similar character. The action of this part of the animal frame is highly peculiar: after the expulsion of its contents, the intestine has, through the medium of the internal sphincter and the levator ani, an inverted action, and an instrument, introduced for the purpose of relieving the intestine, has been suddenly grasped, snatched from the fingers of the operator, and drawn up into the rectum and colon! Such a case has been described to me by Mr. Perry. The following has occurred to the celebrated Scarpa:—

FOREIGN BODY INTRODUCED INTO THE RECTUM.

A villager, aged 28, of a constipated habit, experiencing very acute pain after a longer constipation than usual, and finding all attempts at defæcation fruitless, intro-

duced by the anus a long piece of reed, hoping thus to induce mechanically the expulsion of the matter accumulated in the intestine. In this he succeeded; but in order to render the evacuation more complete, he again introduced the reed, and more deeply, so that it escaped from him and penetrated further. He then made violent efforts in the hope of inducing its return; but in vain; terrible pain soon ensued, and continued all night; the next day the patient was taken to the hospital. The surgeon in attendance tried in vain to reach the foreign body with the finger and with the bent forceps.

SEVERE PAIN IN THE RECTUM AND ITS REMEDY.

There is a peculiar and severe pain of the rectum, which comes on in paroxysms, generally during the first sleep, and of which I have not seen any description in medical writings. It appears to me to depend on some hæmorrhoidal tumour, compressed by the action of the sphincter ani. The infallible remedy is, to rise out of bed, and to make a forcible and sustained effort to relieve the bowels. The changed position of the hæmorrhoid, under these circumstances of a positively relaxed sphincter, and effort of protrusion, leads to perfect relief of the paroxysm of pain.

(*To be continued.*)

A SKETCH AT ST. GEORGE'S.

To the Editor of THE LANCET.

SIR:—After the dull and sombre routine of a five years' apprenticeship, the medical student looks forward, with a degree of pleasure, to his career in London. He fondly hopes that, in the hospitals of the metropolis, those golden dreams, which were the sole companions of his menial labours in the dispensary, will be realised. He paints the future in bright rainbow colours, and prepares to enter the Elysian fields of professional study with mingled feelings of pleasure and emulation. But, alas! how often are his expectations blasted, and how often do his imaginations fail as they approach the reality! Like the pilgrim in the desert, the gorgeous palaces and sparkling lakes he traces in the distance vanish into air as he approaches them. Such are the expectations the enthusiastic student forms as he pons over the nominal advantages which the prospectus of almost every hospital holds out to him; until, when too late, he finds they are but a lure to entrap, but as a costly robe concealing deformity beneath. Such is, at least, generally the case; and, in exposing some of the abuses of St. George's, though I dare not hope to induce their reform, it will yet be something to unveil the truth: and, *in limine*, I would observe, that the general tenor of the regulations show, that they are framed far less with any idea of being conducive to the benefit of the pupils, than to the convenience of the medical officers attached to the hospital. They have it, in fact, all their own way; and the student must bend the knee, "if Cæsar carelessly but nod on him." There is none of that balance of power which ought to exist between a teacher and his class, whereby each can check the other; and which is as necessary for the benefit of the latter, as for the proper execution of the public duties of the former. Our medical officers barely act up to the letter of the law; and any reform or alteration which the body of students require is not yielded to, if it interfere with the personal convenience of the teacher.

Our physicians are, Drs. Seymour, Hope, Wilson, and, last not least, "Roderick M'Leod." Dr. Seymour still lectures on the Practice of Physic, and manages to give as little information in an hour's time as any man I ever heard. His lectures are sprinkled pretty plentifully with his attic salt; he generally devotes twenty minutes to "rhetoric, which the learned call rigmarole;" and ekes out the hour with the details of some interesting case which he has attended "in a family scarcely second to royalty itself." By his own account, you would think he was dubbed senior physician to the aristocracy; and if you ask him his opinion of a case, he seriously tells you it is just like the case of Lord H——, or Dowager Lady L——.

Dr. Hope goes round, at intervals, with his stethoscope in his hand; and all who do not worship his wooden idol with the zeal of a fanatic, will have but little chance of gaining any advantage from him: indeed, he will not have a clerk who is not a proficient auscultator. Verily this is a pretty way of teaching one his profession; for it seems that, instead of going to Dr. Hope to learn, you must learn first, and then go to him for information after. Nor is this all: his present clinical clerk has just had Roderick's book for three months, and then again takes Dr. Hope's, to the exclusion of those who have a priority of claim, and whose names have been upon the list a greater length of time. Is this fair or honest behaviour to the pupils? Dr. Hope's clinical remarks are, perhaps, less instructive than amusing. His aphorisms are, first, that old women know more about medicine than many physicians—I do not know whether he includes himself; and, second, that women only suffer from affections of the heart and tight lacing. The doctor is determined to preach a crusade against the staymaker; and, I believe, intends making some, no doubt, interesting experiments on the effects of wearing stays. But I must conclude for the present, fearing

to engross too much of your valuable columns. You shall, however, hear from me again shortly.

A Student of St. George's.

*** We fear that the disappointment which our poetical young friend is suffering at St. George's is localised by no especial patent to the hospital of the West, but is made equally sensible to every sanguine aspirant for professional information in all our London hospitals. The balance between the comfort and ease of the teacher and the interest of the pupil is sadly unequal; and nothing but the establishment of a medical faculty, elected by and responsible to the profession at large, can remove the imperfections under which medical education at present groans.

PHYSICIAN-REFORMERS!

THE TITLES AND DIGNITIES OF THE PROFESSION!

Necessity for an Uniform Standard of Education.

To the Editor of The Lancet.

Sir:—The Quarterly reviewer on Medical Reform asserts, that there are many universities where a medical degree can be had for a few pounds. Now, as I am rather incredulous, will you have the kindness to inform me if such be the fact, and their designations, for I think that if such places do exist, the public may be benefited by such knowledge, in taking care not to employ persons holding such doubtful testimonials. I am, Sir, your most obedient servant,

C. A. T.

February 23, 1841.

*** While the College of Physicians is disgusting the medical public with its twaddlings on "titles and dignities" (see our last Number), they might as well be reminded that *Dr. Pitcairn's horse* was dubbed an M.D. Is it a distinction such as this that the aspirant in medicine is to look for? Are these the honours of a learned profession? Nay, most potent physicians, you are too facetious—you wound our sides with laughter. And the physicians shall be more worthy than the surgeons, and the surgeons more worthy than the apothecaries, and the apothecaries more worthy than those *impertinent* general practitioners. Is this your concordance, most worthy physician-reformers?

PRURITUS ANI.

To the Editor of The Lancet.

Sir:—Amidst the many annoyances to which our profession is subject, it is refreshing to meet with that liberality in our own body, which distinguishes it in an especial manner from all others, namely, the readiness to communicate the result of our experience to each other, without any hope of reward, but that which results from the consciousness of doing good to our fellow-creatures.

As you were kind enough to insert a short letter of mine on the subject of pruritus ani, requesting the opinion of any professional brother who had been successful in its treatment, I trust you will allow me, through the same medium, to express my acknowledgments to your correspondents for their ready compliance.

In the letter of "X. Y. Z.," he mentions the application of Gowland's lotion, which is thus ordered in "Gray's Supplement:"—Bitter almonds, 1 oz.; sugar, 2 oz.; distilled water, 2 lbs.: grind together and strain, and add corrosive sublimate, 3ij., previously ground, with spirit of wine, 3ij.

If it will not be troubling "X. Y. Z." too much, I should feel much obliged by his saying if the above formula is such as he alludes to. I suppose there is no misprint in substituting Gowland's lotion for Goulard's lotion; the latter of which, we are all aware, is a preparation of lead. I am, Sir, your most obedient servant,

February 22, 1841. A Subscriber.

SIR ASTLEY COOPER, BART., F.R.S.

To the Editor of The Lancet.

Sir:—Many inquiries having been made as to the appearance of a "Life of Sir Astley Cooper," I beg to inform you, for the information of the profession, that this distinguished surgeon has left ample materials for a most interesting biography, now in the hands of his nephew, Bransby Cooper, Esq., by whom the whole will be arranged, and prepared for speedy publication.

A new edition of his beautifully-illustrated work on the "Testis," which received the author's final additions, has passed through the press; the plates are now in process of colouring, and the volume will be issued during the present month.

His work on "Dislocations," I am now preparing to publish in an 8vo size, with the plates redrawn, engraved on wood in the best style, and printed with the text, carefully edited, with additions, by B. Cooper, Esq. This practical work will be offered at a price to make it available to every student of surgery. I am, Sir, your obedient servant,

John Churchill.

Princes-street, Soho, March 1, 1841.

DR. BUTTON'S JOURNALS.

To the Editor of THE LANCET.

SIR:—I am a plain man, knowing little of the customs of the medical world, and never read your LANCET until the late "to do" about the insane. The late letters of Dr. Button and PHILANTHROPOS puzzle me strangely. It seems that Dr. Button kept two journals; one for his own use, and one for the use of the superintendent and the committee, and that the two journals do not agree either in dates or facts. Is this so? And is this consistent with the usages of medical men, or is it a solitary case? I should be glad, also, to know, if he does the like in Dorsetshire? Perhaps he will tell us. Your obedient servant,

RUSTICUS.

STEPHENS' HOSPITAL, DUBLIN.

(*From a Correspondent.*)

IT will be interesting to many of our Irish readers to learn, that the situation of house-surgeon to the above institution is vacant, Mr. Willy Colles having completed the period of service allotted to any one individual. Of course the appointment is now open to competition, and the most deserving will be elected. We place no faith in the rumour that has been so industriously circulated, that as Colles jobbed in his son, so Crampton purposes now to job in his nephew, who only got his licence three months since; that Cusack will again be the manager. This cannot be; we have the authority of Dr. Jacob and the "Dublin Medical Press" to rank these illustrious surgeons among the references on principle; so that there cannot be a doubt but that they will co-operate with the governors, so to put their principles in operation as to secure the best interests of the hospital, and promote the welfare of its poor inmates. The election will take place immediately, so that candidates had better send in their testimonials and qualifications at once.

WINDOW-TAX ON HOSPITALS.

ON the 9th instant, an order of the House of Commons was made, for a "return of the window-duty charged on hospitals in England, in 1840, distinguishing the class of officers and servants charged therewith, and the number of windows charged to each respectively."

We trust that this may prove to be a preliminary to the tax on windows on hospitals being repealed altogether.

COLLEGE OF SURGEONS.

MR. ARNOTT, of the Middlesex Hospital, has been selected to fill the Chair, in the Council of the College, vacated by the decease of Mr. Howship.

BOOKS RECEIVED.

The Domestic Management of the Sick-Room, Necessary in aid of Medical Treatment, for Cure of Diseases. By Anthony Todd Thomson, M.D., F.L.S. London: Longman and Co., 1841.

A Practical Treatise on the Causes, Nature, and Treatment of Strictures of the Urethra; the whole Illustrated by Cases. By Francis Burdett Courtenay. London: Simpkin and Marshall, 1841.

On Scientific Medicine, and its Relations to and Claims upon Society at large; an Address read before the President and Members of the North of England Medical Association. By William Elliot, M.D. Carlisle: Jefferson. 1840. pp. 44.

TO CORRESPONDENTS.

We have received the printed abstract of Mr. Levison's lecture on Quackery, at the Birmingham Athenæum. Such expositions of the character and mischief of quacks are calculated to produce very useful effects on the public mind, which there is hardly any mode of so effectually awakening to the danger of their proceedings.

We have received the *Nottingham Review*, the *Birmingham Journal*, the *Bristol Mercury*, and a large number of other country papers, recently; but in only two instances have the parties transmitting them indicated which article, of the thousand that they contain, they desire to be noticed. In reply to the question, relating to the inquest on the woman to whom laudanum was sent, instead of tincture of rhubarb, we can only say that the jury must have been in an extremely lenient mood when pronouncing their verdict on the facts.

Communications have been received from *Mr. Tomkins; A Subscriber; C. A. T.; M.D.; A Medical Superintendent; J. R. W.; Dr. Epps; Dr. Mackinlay; Mr. Ward; W. H. O.*

A Constant Subscriber. "Admission to the various learned societies" of London requires that the candidate should be recommended by two or more members; his name is then suspended for several weeks in the society's room, and, at an ordinary meeting, he is elected by ballot. If a gentleman, wishing to enter one of these societies, know but one member to whom he can apply, that friend will procure for him the signature of the number of members required by the regulations.

We are obliged to defer the letter of *Delta* until next week, from want of space.

Legis Cultor et Chirurgus. Our opinion on the subject was expressed in a late Number. The letter now forwarded need not be published.